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The CoEVOLUTION Quarterly

GENETIC TOXICITY:

New chemicals may have already done more damage to the human gene pool than nuclear energy ever will. **(pp. 4-39)**

No. 21 Spring 1979

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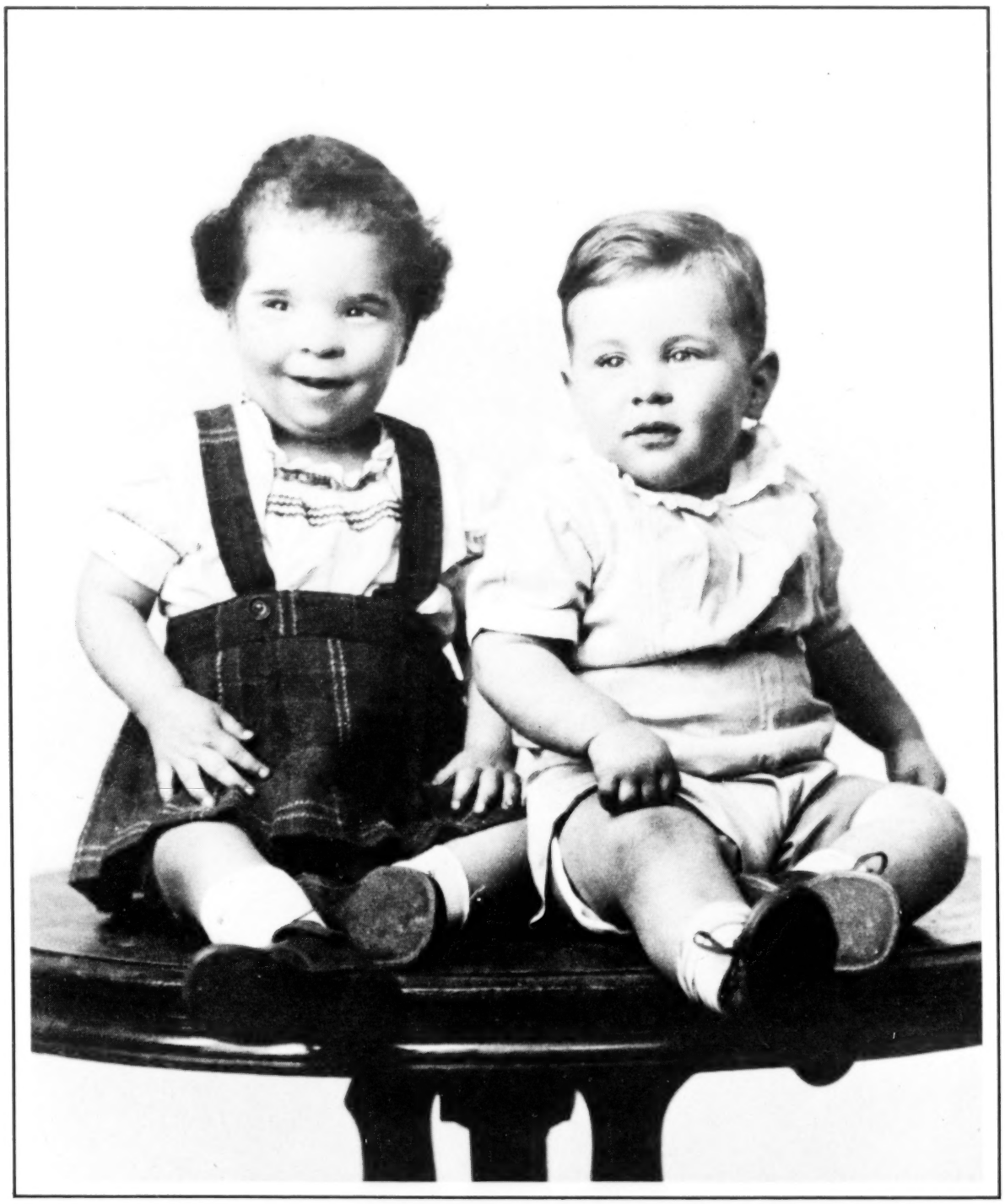
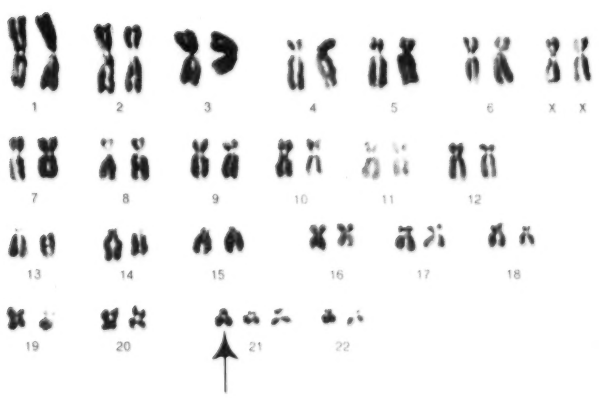
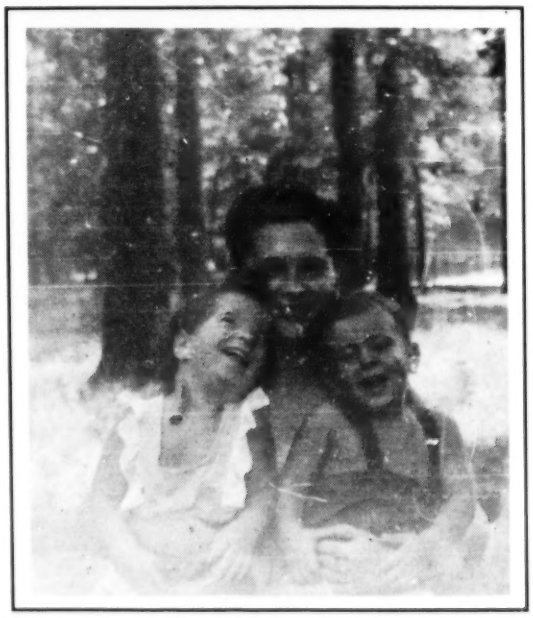


Cookie and Steven



Gene complement of a human female with Down's Syndrome (mongolism) – showing three chromosomes No. 21 instead of the normal two. About half of the cases of mongolism are inherited and half are caused during pregnancy. Illustration from **Evolution**, *Dobzhansky et al.*



Cookie, mother, Steven

Cookie

BY STEVEN HANDLER KLEIN

Cookie is a Mongoloid. Webster's *Dictionary* defines Mongolism as "a congenital condition which is characterized by moderate to severe mental deficiency, by slanting eyes, by a broad short skull, etc."

Cookie is my sister. She is a year and a half older than I. I was born on New Year's Eve of 1942. Three weeks after I was born, my father joined the Marine Corps and spent close to three years fighting Japanese men in World War Two. He had left before Cookie's condition had been diagnosed and confirmed. When he returned from the war and found out the shape Cookie was in it was said to have broken his heart. Cookie was always reputed to have been the favorite of my father's two children. It was never really found out for sure what caused him to become the irresponsible, alcoholic and violent individual which he became. Some people think it might have been because of the three years which he spent in the South Pacific and some people think that it might have been a result of Cookie's condition. I think that it might have been a combination of both.

Cookie's condition never bothered me. I was never bothered by the fact that many of the children on the block wouldn't play with us. Their parents were afraid that Cookie's condition was catching. The late 1940s may be said to have been a rather ignorant age. Cookie's condition is nowhere near catching. Her condition cannot be improved at all. Men would rather walk on the Moon.

It also never bothered me that many of the other children tried to bully us. Cookie could beat them all up. She was my protector. It got to a point where nobody could lay a hand on me when she was around. It didn't matter to me that Cookie couldn't stay within the lines when drawing in a coloring book. I couldn't either; but my inability to do so was never as pronounced as hers was.

What did bother me was my waking up, one day, when I was eight years old and discovering her gone. A doctor had advised my mother that placing Cookie in an institution in upstate New York would be the best thing for me, her "normal" child. My mother placed Cookie in the Wassaic State School for the Mentally Retarded in upstate New York. The doctor had advised my mother that Cookie's being a hundred miles from us, would make it impossible for my mother to spend all of her time with Cookie. That way, she could devote all of her time to me.

I missed Cookie when I was eight years old. I missed Cookie throughout the years which I spent growing up.

Cookie is dying today. When we were youngsters, we would play on a rather busy and crowded street. Cookie stepped off the curb one day and a car which we thought was parked backed up and struck her. The accident didn't kill Cookie but over the years it has caused her body to develop a curvature of the spine. That curvature will one day cause her spine to grow over and crush her heart.

I find it so difficult to make any sense and meaning out of such a senseless and meaningless existence. I can only hope and pray that having seen Cookie might have caused some people to consider how truly fortunate their lives might be. I can't help feeling that Cookie's condition might have no other purpose. ▪

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Cover

I took the front cover photograph years ago (early '60s) at, I think, the Museum of Science and Industry in Chicago. It was one of a series of about 20 fetuses in jars showing how a baby develops. Good, raw information for us 1950s grade school kiddies when we took field trips to the museum. Some of the fetuses looked blissful, some bored, some worried, as here.

The back cover was drawn a couple years ago by Sausalito designer David Spurgeon, recommended to us recently by Jan Adkins. We've always said, "Co-evolution takes time."

Newsprint paper appears once again under the ink of this issue, but don't feel shorted — you got an extra 16 free pages of it. Now that the paper strike is over, next issue should be back to our bright durable Vista and the regulation 144 pages.

—SB (Stewart Brand)

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Genetic Toxicity

Human Harm to Human DNA

BY STEWART BRAND

WITH EXTENSIVE QUOTES FROM

BRUCE AMES

You know about radiation. This is about harmful chemicals –
which are far more pervasive, far less understood,
far harder to control, and have probably already taken a greater human toll.
At present nuclear energy is a less serious biohazard.

So far most attention has been focused on "environmental"
causes of cancer – chemical carcinogens.
Here we will especially be looking at mutagenicity – the causing of mutations in human genes,
primarily expressed as an increase in miscarriages and birth defects,
but perhaps in other ways as well.
In this regard the science of human genetics, of enormous consequence, is shockingly imprecise.

IT'S SLOW, DEEP POISON. And there's no antidote, no cure. Only prevention.

Bruce Ames:*[1] **Damage to DNA by environmental mutagens (both natural and man made) is likely to be a major cause of cancer[2,3] and genetic birth defects, and may contribute to heart disease[4] and aging[5] as well. These are the major diseases now confronting our society: currently almost one-fourth of us will develop cancer, and a few percent of our children are born with birth defects that might be attributable to DNA damage. Damage to the DNA of our germ cells can result in genetic defects that may show up in our children and in future generations. Somatic mutation in the DNA of the other cells of the body could give rise to cancerous cells by changing the normal cellular mechanisms, coded for in the DNA, that control and prevent cell multiplication. Mutagens are present among the natural chemicals in our diet; among man-made chemicals to which we are exposed (such as industrial chemicals, pesticides, hair dyes, cosmetics, and drugs); and in complex mixtures (such as cigarette smoke and contaminants in the air we breathe and the water we drink). . . .**

Clearly, many more chemicals will be added to the current list of human mutagens and carcinogens. It has been estimated that over 50,000 chemicals produced in significant quantities are currently used in commerce and close to 1,000 new chemicals are introduced each year.[6] Most of these – from flame retardants in our children's pajamas to pesticides accumulating in our body fat – were not tested for carcinogenicity or mutagenicity before their use.

These statements contain two premises which are relatively new to science and owe a great deal to Bruce Ames' work at the Biochemistry Department, University of California, Berkeley. One premise is the considerable overlap of mutagenic with carcinogenic materials – suggesting that a similar or identical disruption of the DNA code in the chromosomes is responsible for mutations inherited through reproductive cells and for cancer which is spread through somatic (body) cells. In other words, if you hear that something is a

Remarks in quotations whose source is not cited are from a conversation taped in January, 1979 between Bruce Ames, Paul Ehrlich, and geneticist Marcus Feldman at Stanford University (where I got my biology degree in 1960). I am indebted for assistance from Ames' colleague Lois Gold, Susan Stern (whose article follows), and CQ staffers Patty Phelan and Anne Herbert. The inaccuracies and misinterpretations inevitable in a piece like this are my responsibility. The intent of the article is to introduce the scope of a problem and equip the reader to do something about it.

–SB

*Boldface quotes in this article are from Ames' most recent paper (December, 1978), "Environmental Chemicals Causing Cancer and Genetic Birth Defects." In revised form it is appearing in Science this Spring. For detailed citation see Note 1.

As serious as are radiation effects, it should be emphasized that – barring nuclear war – induction of mutations by other environmental agents probably is of greater importance. The list of potential chemical mutagens contained in man's diet and other ingested or inhaled substances is a long one. It still increases steadily.

–*Curt Stern,* Principles of Human Genetics, *1973*[49]

Although much attention, both scientific and public, has been given to the possibility of inherited defects from ionizing radiation, virtually none has been directed to the same hazard from chemicals, which may be as great as from radiation. It is now well known that certain chemicals can produce both major chromosomal damage, likely to yield early defects in offspring, and point mutations, minor defects not detectable microscopically in chromosomes, but which, if present widely in the population, can yield undesirable consequences in succeeding generations.

–*Committee on Science and Public Policy National Academy of Sciences*, Biology and the Future of Man, *1970 (Ref. 26, p. 870.)*

There is reason to fear that some chemicals may constitute as important a risk as radiation, possibly a more serious one. Although knowledge of chemical mutagenesis in man is much less certain, a number of chemicals – some with widespread use – are known to induce genetic damage in some organisms. To consider only radiation hazards may be to ignore the submerged part of the iceberg.

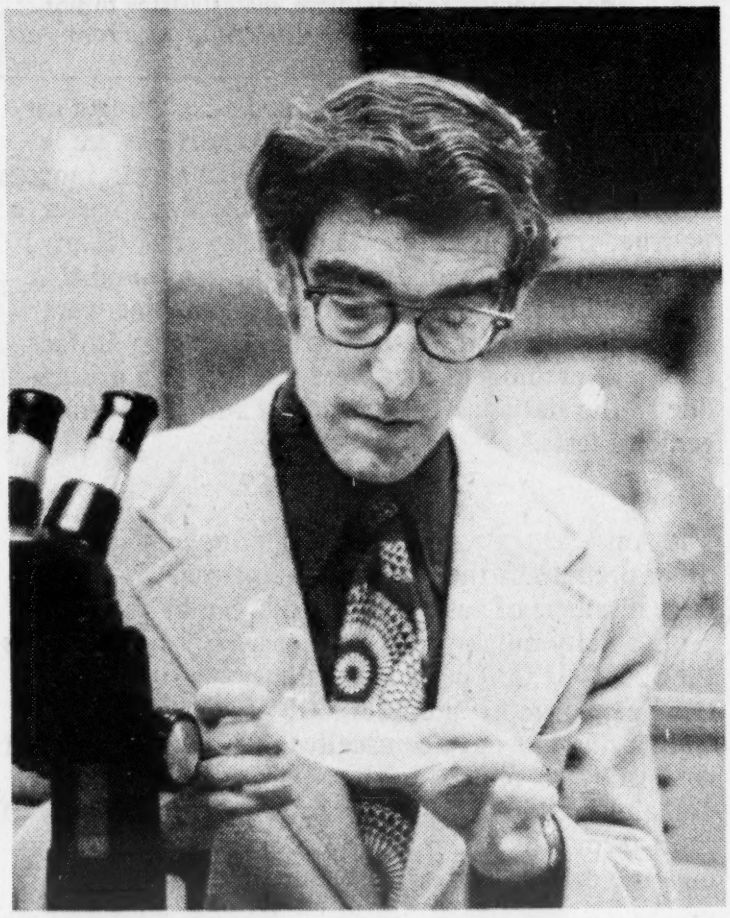
–*James F. Crow, "Chemical Risk to Future Generations,"* Scientist and Citizen, *1968*[50]

Comparing the routine running of the nuclear industry (without bad disasters or accidents) versus the routine running of the chemical industry and asking the question, "Are you more worried about mutations and cancer from nuclear or chemical?", I would say chemical. . . . If the local nuclear power plant has a melt down, you would notice it, but you could easily be melted down by chlorinated hydrocarbons without knowing it's going on.

–*Paul Ehrlich, conversation, 1979*

mutagen, it is probably also a carcinogen. And vice versa. They both can be called "genotoxic."*

Ames: **We have validated our tests for the detection of carcinogens as mutagens by examining over 300 chemicals reported as carcinogens or non-carcinogens in animal experiments. The results show that almost all (90%: 158/176) of these chemical carcinogens are mutagenic in the *Salmonella* test. . . . We also examined the**



Bruce Ames with a petri dish of bacteria and a suspected mutagen – the Salmonella *test. Because of this test Ames is one of the 100 scientists most cited in other scientist's papers.*

---

* Although it is not established that somatic mutations are always involved in carcinogenesis, several lines of evidence strongly point in such a direction:

1. Tumor induction implies a permanent and transmissible alteration of the cells.
2. Tumors have been shown to be of monoclonal origin – that is, originating from one single cell – which is as expected for a mutational event.
3. Known carcinogens and mutagens share the same electrophilic (electron-seeking) property.
4. Experimental evidence indicates that most, possibly all, carcinogens are also mutagens.
5. An impairment of DNA-repair, as in certain human genetic diseases like *Xeroderma pigmentosum*, or in experimental animal systems, leads to an increased incidence of tumors.
6. Cell transformation by oncogenic viruses (i.e., those tending to cause tumors) implies a change at the DNA level.

The close correlation between mutagenicity and carcinogenicity has made it possible to deal with the carcinogenic and mutagenic properties of chemicals in the same context. In that spirit Druckrey has introduced the term *genotoxic* to cover hereditary changes of germinal as well as somatic cells, including tumor induction.[7]

– Claes Ramel, *Ambio*, No. 5-6, 1978.[8]

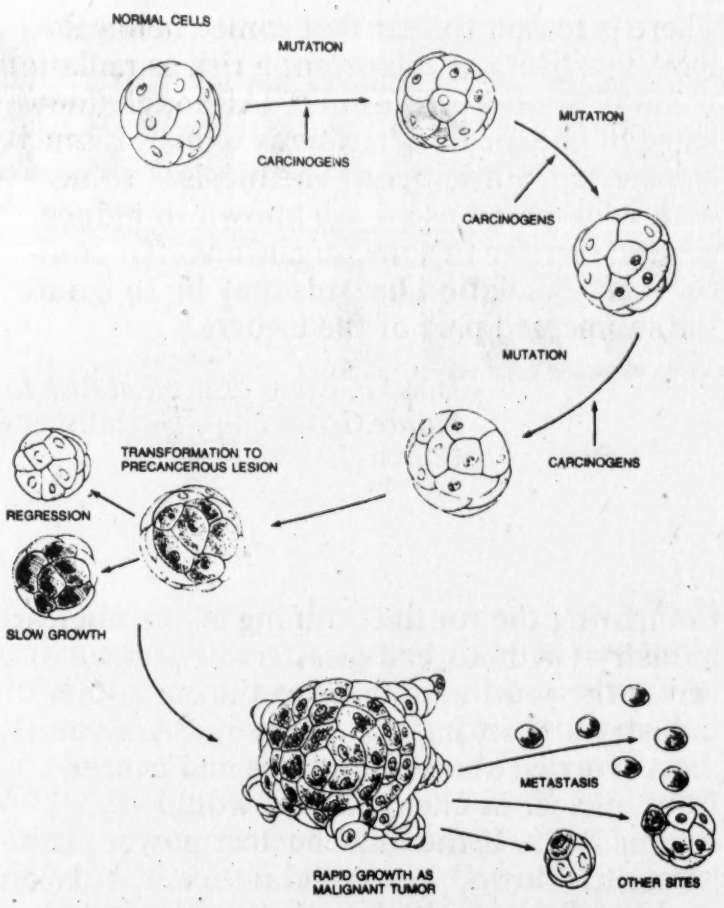


Figure 1. One theory of carcinogenesis states that cells are restrained from becoming cancerous by several independent genes and that tumors develop only when mutations accumulate in all those genes within a single line of cells. The mutations (black dots within cell nuclei) are seldom spontaneous but are apparently caused by carcinogenic factors in the environment. Once a precancerous lesion has formed, it must in many cases regress or grow very slowly; only a few lesions progress to an invasive, metastasizing tumor. (After J. Cairns, 1975. See also Figure 4.) *From* Ecoscience *(ref. 23, p. 593).*

organic chemicals known or suspected as human carcinogens and found that almost all (16/18) were mutagens in the test. . . . Thus, almost all carcinogens tested are mutagens, and the converse also appears to be true: mutagens are carcinogens with few (if any) adequately documented exceptions. We found that almost all (95/108) "non-carcinogens" tested were not mutagenic, and those few that were may in fact be weak carcinogens that were not detected as such due to the statistical limitations of animal carcinogenicity tests.[9]

THE AMES TEST

The Ames test, also called the *Salmonella* test, is the other premise of the opening statements. By its use large numbers of suspect chemicals can be tested for genotoxicity quickly and inexpensively – in two days for $250 - $1,000 per test substance instead of the two years or more and $250,000 required by animal tests (using rats or mice usually). Since the Ames test has made a revolution in the environmentally critical domain of bioassaying, instigating a growing family of short-term tests, it's worth going into detail about how it works and what it has done.

You take a petri dish, the standard micro-organism test tool, and lay in agar (gel for nutrient medium) and a "lawn" of a billion or so of one of Ames' special strains of the bacteria *Salmonella typhimurium.* Very special strains – they've been elegantly tailored: 1) to have a mutation in a gene synthesizing the amino acid histidine, so they can't live in a histidine-free petri dish unless they revert by mutation to the histidine-synthesizing capability; 2) the mutation involved is a "frameshift" in the DNA which is not easily masked; 3) their DNA is specially susceptible to the reversion; 4) the cells are particularly permeable to outside substances; 5) their DNA-repair capabilities are crippled; and their enzymes for "locking in" mutations are enhanced. Four different strains are used to detect different types of mutagens. The result is a test of great sensitivity and high resolution.

(Now you know why labs like Ames' need to work with recombinant DNA – it's their basic tool for this kind of detailed DNA design. Developing the Ames test took ten years – 1964 - 74.)

Also in the petri dish is a standard quantity of homogenized rat liver, whose enzymes will make the test more closely approximate what happens in the mammal. Some chemicals that would not directly mutate bacteria are metabolized into mutagens/carcinogens in rats and us. The liver puree gives the bacteria our problems.

Drop a quarter-inch piece of filter paper soaked in the substance you're testing into the middle of the dish, keep it at body temperature for a day, and look: if there is a ring of bacteria colonies around the test substance, it is mutagenic. A significant number of the crippled *Salmonella* bacteria have mutated back to histidine-synthesizing viability and have generated colonies big enough to see. (See figures 2 and 3).

Using this test Ames and Arlene Blum detected in 1977 the mutagenicity of Tris, the fire retardant in sleepwear used by fifty million American children and absorbed into their bodies. A year and a half later Tris was removed from the market when it was found to cause cancer in animals. In 1975 Ames' lab found that 90% of the hydrogen peroxide hair dyes used by twenty-five million Americans, mostly women, were genotoxic and absorbed through their scalps. The hair dyes are still on the market.

Bad news – and there's more to come – but the bearer of the bad news is also itself the good news.

Free of charge or patent, Ames' lab has sent their strains of *Salmonella* to over 2,000 government, industrial, and academic laboratories who wanted to conduct their own tests. Said Ames recently, "Most of the industries in the world are using it – because it saves them money. In developing a chemical they go through hundreds of chemicals before they get one they really like. This way they can be testing them with our test and other short-term tests, and if something is bad they can throw it out and it doesn't cost them much. But when they finally develop a product, then it costs a lot of money to run an animal cancer test and they're not overjoyed to find out it's a carcinogen at the very end. So the companies have all been enthusiastic about using these short-term tests."

Since they're keeping genotoxic products from ever reaching the market, we can share their enthusiasm.

Also using the tests are regulatory agencies and environmental investigators. Ames: "Lots of laboratories

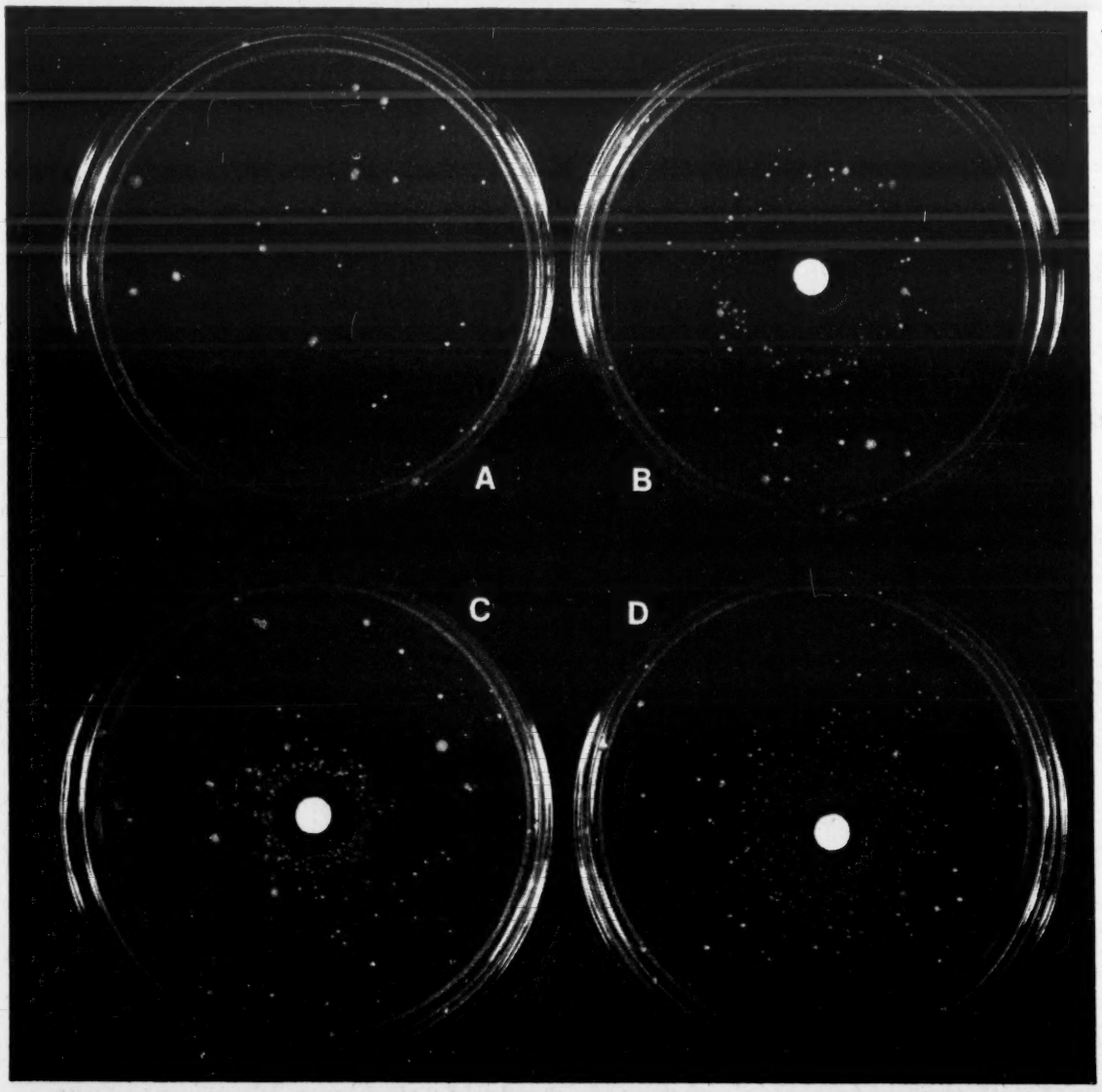


Figure 2. The "spot test" for mutagen-induced revertants. Each petri plate contains, in a thin overlay of top agar, the tester strain TA98 of *Salmonella* bacteria and, in the case of plates *C* and *D*, a liver microsomal activation system (S-9 Mix). Mutagens were applied to 6-mm filter paper disks, which were then placed in the center of each plate. Mutagen-induced revertants appear as a circle of revertant colonies around each disk.

A. Control plate: spontaneous revertants.

B. Plate showing revertant colonies produced by the Japanese food additive furylfuramide (AF-2) – 1 microgram.

C. The mold carcinogen aflotoxin B, -1 microgram.

D. 2-aminoflorene – 10 micrograms.

Reprinted, with permission, from B.N. Ames et al.[51]
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now are using the short-term tests for looking at all kinds of compounds in the environment, particularly complex mixtures. Water pollutants or air pollutants are horribly complex mixtures. You can use this for trying to figure out what chemicals in there look dangerous and where they're coming from. That's something you couldn't do with a traditional animal cancer test."

The Ames test is not foolproof. It misses 10% of the potential carcinogens – some of the chlorinated chemicals, pesticides, and metals.[10] Fortunately the success of the Ames test has inspired a whole generation of other short-term tests which, taken together, can provide an effective screen. Most laboratories using the Ames test now include it as one of a battery of short-term tests. Ames' colleague Joyce McCann reports there are at least 80 such tests being developed – other tests with micro-organisms such as the Pol-A test working with *Escherichia coli*; whole organism tests using *Drosophila* (fruit flies), small fish, etc.; tests in cultured mammalian cells; and tumor-forming tests with mammalian cells.[10]

The animal tests still have the final say, but only 100 such tests a year are conducted by the National Cancer Institute, and they take two to three-and-a-half years.* Ames: **One limitation of animal cancer tests, however, is their sensitivity. An environmental carcinogen causing cancer in 1% of 100 million people would result in a million cases of cancer. To detect a chemical causing cancer in only 1% of the test animals, we would have to use 10,000 rats or mice.**

[more →]

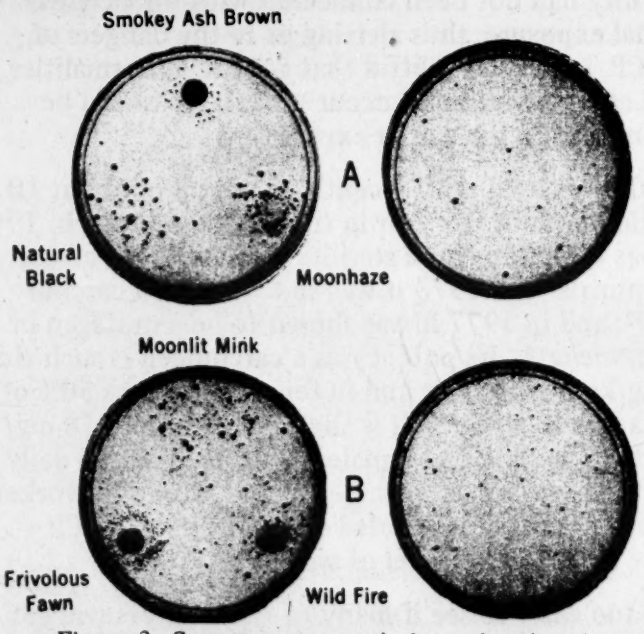


Figure 3. Spot tests on petri plates showing the mutagenicity of various hair dyes on strain TA1538: Moonhaze no. 32 (Miss Clairol), Moonlit Mink no. 360 (Clairol Born Blonde), Wild Fire no. 32 Roux fancitone) (all tested without peroxide), and Frivolous Fawn no. 23 (Roux fancitone) (mixed with H_2O_2 as per instructions). Control plates without hair dyes are on the right. Plates B, but not A, contain liver microsomes (S-9 Mix). Smokey Ash Brown no. 775 and Natural Black no. 83 (Clairol Loving Care) are semi-permanent, non-oxidative type dyes. *From Bruce Ames et al.*[52])

*Because of the high cost, usually only 50 animals are used, even in a thorough experiment. The sensitivity problems are partially overcome (though not to complete satisfaction) by using very high doses.

JARGON

Mutagenic – *mutation causing (includes chromosome scrambling and point mutations within chromosomes).*

Carcinogenic – *cancer causing.*

Genotoxic – *DNA-damaging (combines meanings of "mutagenic" and "carcinogenic").*

Teratogenic – *"monster"-causing. Any influence during pregnancy that leads to birth defects. An unknown proportion of teratogens are mutagens.*

DNA – *Desoxyribonucleic acid, the "double helix" of material in chromosomes that passes on cell and whole-body characteristics. The reproductive essence.*

EPIDEMIOLOGY

In fact one of the major test animals in use is humans, without their knowledge or consent. It's called epidemiology – what turns up in human medical histories.

Ames: **A chemical mutagen (and carcinogen) – the agricultural pesticide dibromochloropropane (DBCP) – was recently discovered, somewhat by accident, to cause infertility in many DBCP workers who had been exposed to it. DBCP might also cause a variety of genetic abnormalities among the offspring of those workers who were able to produce children. If the sterility had not been connected with the occupational exposure, thus alerting us to the dangers of DBCP, it seems doubtful that genetic abnormalities and cancer that might occur years later would be connected to the earlier exposure. . . .**

DBCP was used until recently at a level of about 10 million pounds per year in the United States. In 1961 it was shown to cause sterility and testicular atrophy in animals[11]; in 1973 it was shown to be a carcinogen[12]; and in 1977 it was shown to be a mutagen in *Salmonella*[13]. Its potency as a carcinogen is such that 2 mg/kg/day in male and in female rats gives 50% of the animals cancer. (It is slightly less potent [8 mg/kg/day] in male and female mice.) A 2 mg/kg daily level is approximately the exposure level of a worker breathing air contaminated with 2 ppm of DBCP – close to the actual level of worker exposure.

It is too early to see if many of the workers will get cancer in 20 years, but it is not too early to see that a high percentage of them are now infertile. Currently, almost 100 workers in several companies have been made sterile or have low sperm counts as a consequence of exposures to DBCP for as little as one to two years. Because 80 industrial plants were handling the material, many more workers will probably be discovered to be affected by this chemical. It is unclear how much DBCP was eaten by consumers as residues in food since there has usually been no maximum level standard for residues.

One problem is that, other considerations aside, humans are truly lousy test animals. We're large, slow-reproducing, deceptive, exposed to innumerable potential toxins, and we don't hold still in any sense. The ideal test organism is uniform. In the noise of our immense variability, the signal of any particular environmental cause of disease gets lost unless it's overwhelming. This is particularly true of cancer, which takes 20 to 30 years to develop after the carcinogenic exposure. Ames: **Even with the current level of sophistication of human epidemiology it is almost unheard of to identify the causal agent when the increase in risk is below 50% for the type of cancer being examined, and even increases considerably above that are difficult.**

The best human cancer data by far comes from cigarette smoking. A considerable population does it, another considerable population doesn't (the control group), and smoking is strongly correlated with a particular disease – lung cancer. Have a look at Figure 4 for a horrifying determinism. You can predict the exact number of women who will die of lung cancer in 1980 from the smoking they started in the '50s – over 60 per 100,000 population. For those women, stopping smoking now won't help much. 1980 is next year.

THE CHEMICAL TIDE

As smoking by some men dramatically increased in the first half of this century, and smoking by some women in mid-century, the exposure of all of us to new chemicals has taken off since World War II. In the next decades we will be paying the price. Ames: **The tremendous increase in production of chemicals, such as vinyl chloride, that started in the mid-1950s may result in a steep increase in human cancer in the 1980 decade if too many of these chemicals with widespread human exposure are indeed powerful carcinogens.** For the 1980s, stopping all hazardous chemical exposure now wouldn't help much even if we could.

About four million chemical substances have been identified.[14] Ames says over 50,000, others say 63,000 are in common commercial use in the U.S.,[10] and 1,000 new chemicals are introduced each year. For a sense of the volume of production and its recent increase examine Figure 5. Worldwide the total chemical business per year is $80,000,000,000.[15] However you assess the current state of technology and affluence in the world, chemical production and use is at the heart of it.

Now, despite the impression we get from the newspapers, not all chemicals are carcinogenic. Most are not. Of the 3,500 "adequately" tested so far at the National Cancer Institute for carcinogenicity in animals, only 750 tested positive, and those were suspect chemicals being tested.[10] Nevertheless most of the chemicals in common use have yet to be tested at all.

To correct another common impression, Ames comments, "It isn't that everything artificial is bad and natural is good, because there are a wide variety of natural mutagens. For example, Sugimura and his group in Japan have shown that when you char food with a lot of protein in it you make lots of mutagens. What the risk of that is we don't quite know. Obvi-

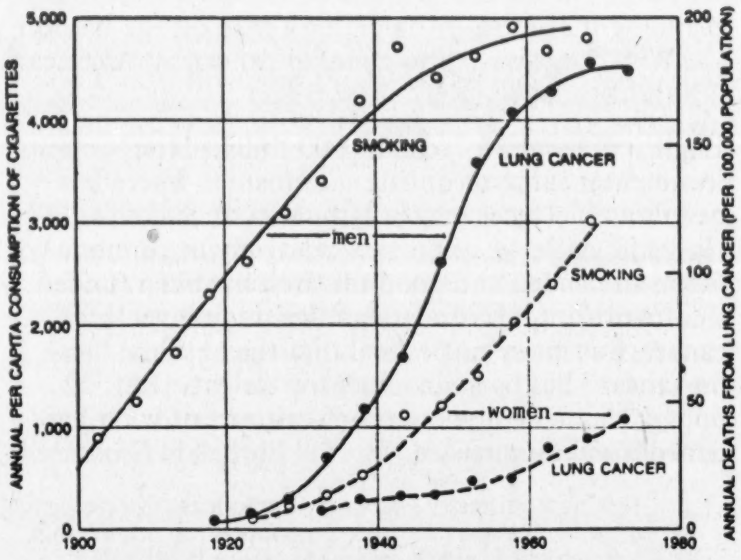


Figure 4. Ames: **Cigarette smoking and lung cancer are unmistakably related, but the nature of the relationship remained obscure because of the long latent period between the increase in cigarette consumption and the increase in the incidence of lung cancer. The data are from England and Wales. In men (solid line) smoking began to increase at the beginning of the 20th Century, but the corresponding trend in deaths from lung cancer did not begin until after 1920. In women (dotted line) smoking began later, and lung cancers are only now appearing.***

ously humans have been doing it for quite a long time. On the other hand 25% of us get cancer, and it's likely that a good part of this is due to cigarette smoking, ultraviolet light, and natural carcinogens in our diet, as there hasn't been time for the modern chemical world to really hit us yet.

"A cigarette is, say, ten minutes off your life, and people are willing to smoke two packs a day and live eight years less than a non-smoker. Smoking is fairly addictive. If it turns out that a charcoal-broiled steak is fifteen minutes off your life (I don't know if it's that), maybe people will say, 'What the hell, I don't eat them that often and they're good,' and other people may say, 'I'd rather have a poached fish than a broiled fish.' "

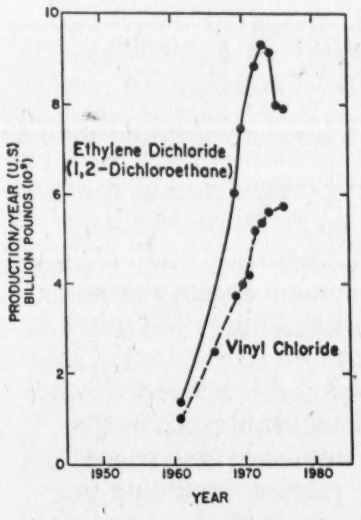
Soot was the first environmental cause of cancer to be identified (in 1775 by Sir Percival Pott, investigating scrotal cancer in chimney sweeps). One of the most potent mutagen/carcinogens known is aflatoxin, a biochemical product of a naturally occurring fungus (sometimes found in peanut butter).

SMOKING

So there's lots of chemical exposure, most of it encountered unwillingly. But perhaps the worst exposure is not only encountered willingly, it's sought and paid for by individual choice.

Ames: "I'd be surprised if there are very many things in the modern chemical world that do as much damage as cigarettes. It's clear they are causing life shortening, and I think more and more evidence will come out for genetic effects in the children of smokers."

It's no wonder Ames is alert to this. As Arthur Lubow reported in *New Times*, "Cigarette smoke is so mutagenic that it knocks the Ames test off the scale. 'The Ames test can easily detect smoke from 1/100th of a cigarette as being mutagenic.' says Byron Butterworth,



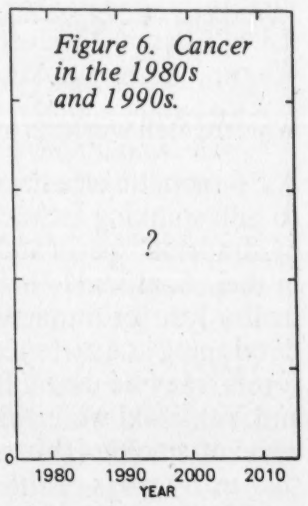


Figure 5. Ames: **Production of two mutagens/carcinogens with widespread human exposure: ethylene dichloride and vinyl chloride (production data from "Top-50 Chemicals" issues of *Chemical and Engineering News*). Approximately 100 billion lbs. (5 x 10^{10} kilos) of ethylene dichloride and over 50 billion lbs. of vinyl chloride have been produced since 1960. Ethylene dichloride is a volatile liquid that is the precursor of vinyl chloride and is also used extensively as a fumigant, solvent, gasoline additive (200 million lbs/yr), and metal degreaser.**

Ethylene dichloride was first shown to be a mutagen in *Drosophila* in 1960, and later in barley and *Salmonella*, but this fact has been ignored. The first adequate cancer test in animals has just been completed by the National Cancer Institute (September 1978) and is positive in both sexes of both rats and mice. Vinyl chloride gas is used to make polyvinyl chloride (PVC; vinyl) plastic. It was shown to be a carcinogen in rats and in people in the mid-1970s, and a mutagen in *Salmonella* and other systems shortly afterwards.

* From J. Cairns, "The Cancer Problem," *Scientific American*, (November, 1975), p. 72. Copyright 1975 by Scientific American, Inc. All rights reserved. Reprinted by permission.

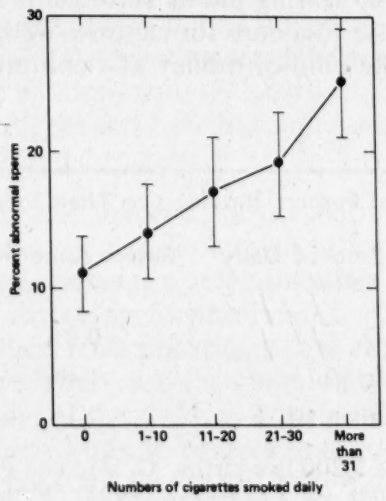


Figure 7. Semen changes in cigarette smokers. Each circle and error bar represents the mean and standard error of the level of sperm abnormalities in groups of men who for more than 1 year smoked the numbers of cigarettes indicated. In order of increasing dose, each point is based on 50, 22, 43, 48, and 7 males, respectively. Reproduced from Viczian.[17]

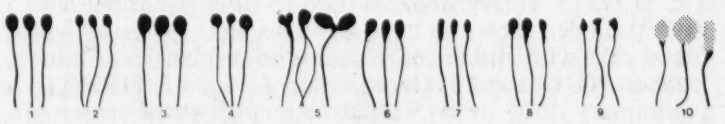


Figure 8. Silhouettes of abnormal human sperm used by Andrew Wyrobek at Lawrence Livermore Laboratory for scoring sperm samples from exposed subjects. 1) Normal (oval), 2) small, 3) large, 4) round, 5) doubles (heads, tails, etc.), 6) narrow-at-the-base, 7) narrow, 8) pear, 9) irregular, 10) "ghosts."

director of genetic toxicology at the recently established Chemical Industry Institute of Toxicology.' We can't allow smoking in the laboratory.' "[16]

Who the hell working in such a laboratory would smoke?

As for genetic effects, several German studies appear to link smoking fathers with an increased incidence of abnormal sperm and miscarriages and birth defects in their families.[17,18,19] The human sperm abnormality test for mutagenicity that Andrew Wyrobek is developing at Lawrence Livermore Laboratory, California, may be useful in pursuing this research. Ames and Yamasaki were able to detect mutagens in the urine of smokers (but not in non-smokers), suggesting that many parts of the body, perhaps including the gonads, are indeed exposed to some of the gram of mutagenic tars that the two-pack smoker collects daily.[20]

Smoking mothers, according to a brand new analysis of 50,000 pregnancies by the U.S. Collaborative Perinatal Project, significantly increase their chances of miscarriage, strongly increase the likelihood of birth defects (usually fatal), and somewhat increase the occurrance of crib death. Even if they stop smoking before getting pregnant, they have a higher risk of mislocated placenta and dangerous birth complications.[21] To what degree these problems are *genetically* caused is unknown.

In the United States there are 80,000 cancer deaths per year directly attributed to cigarette smoking.[22]

CANCER

You may recall in 1971, when the National Cancer Act was passed, hearing public statements such as, "We are so close to a cure for cancer. We lack only the will and the kind of money and comprehensive planning that went into putting a man on the moon . . . Why don't we try to conquer cancer by America's 200th birthday?" (Ref. 22, p. 322.)

Eight years and $4,762,000,000 dollars later, you no longer hear such optimistic statements. There has been notable success with lymphocytic leukemia, Hodgkin's disease, and other relatively uncommon forms of cancer, and good research has been funded that contributes to understanding and preventing cancer, but many critics feel that the national "war on cancer" has been an expensive defeat. (Ref. 22, pp. 14-15.) The now-common critique of what happened is well summarized by Paul Ehrlich in *Ecoscience:*

> It is now generally accepted that at least three quarters of human cancers are "environmental" in origin (that is, not caused by viruses, spontaneous breakdown of immune mechanisms, and the like). . . The scientists most involved in the "war" were largely recruited from the ranks of surgeons, biochemists, radiologists and virologists – mostly people with little interest in studying the release of carcinogens into the environment or the possible nutritive factors involved in the induction of cancers . . . In the mid-1970s it appeared likely that billions of dollars will be spent during the rest of this century, attempting to cure people whose sickness could have been prevented.[23]

Through 1976 the amount of the vast National Cancer Institute budget spent on cancer prevention was about 12%. It's now increasing markedly. (Ref. 22, p. 328.)

Interestingly, the Ames test came out of pure research on bacterial genetics, work in a completely different ballpark from cancer research and funding. It's also interesting that Ames spends a considerable amount of his time scanning and citing the work of people well outside his own field (Cf. his review of *Current Contents* on p. 73.

NUCLEAR RADIATION

Currently the most active war-on-something going on in America is the guerrilla War on Nuclear Energy. It's also the most successful – indeed pinching off the construction of new reactors and receiving the acknowledgement and approval of even Herman Kahn.[24]

Oddly, most of the anti-nuclear attention and emotion is focused on reactor safety. Odd, at least, when you consider:

1) The prospect of nuclear war, the one catastrophe that overshadows everything else, including population overload and the chemical hazards discussed in this article. That international encouragement of nuclear energy feeds the proliferation of nuclear weapons seems the strongest argument against a plutonium economy, even thinking only in terms of radiation exposure.

2) The cultural perspective. Any society that so discounts the future as to leave massive radioactive wastes earns the contempt of history.

3) The economics of reactor construction, use, and dismantling – already bad and getting worse.

4) The actual safety record of the nuclear industry, while not dazzling, is pretty good.

Effects of Fathers' Smoking on Their Infants*

Cigarettes Smoked Daily by Father	Severe Abnormalities in Babies
0	0.8%
1 to 10	1.4%
more than 10	2.1%

From a study of 5,200 live births. G. Mau and P. Netter, *Dtsch. Med. Wschr. 99,* 1113-1118 (1974). Fathers' smoking affects the incidence of abnormalities whether the mother smokes or not. In addition, fathers' smoking is associated with an increase in perinatal mortality. (Compiled by Bruce N. Ames and Lois Swirsky Gold.)

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* The average two-pack-a-day smoker dies eight years earlier than the average non-smoker (M. Gail, *J. Chronic Dis. 28,* 135 [1975]). Heavy smokers (two to three packs per day) have also been shown to have about six times as many white blood cells with visible chromosome abnormalities as non-smokers (G. Obe and J. Herha, *Hum. Genet. 41,* [1978]). A preliminary study by M. Viczian suggests that the semen of smokers has a higher proportion of abnormal sperm, and that this proportion increases the greater the number of cigarettes smoked daily. However, these results need to be confirmed in a study utilizing a more carefully selected control group. M. Viczian, Zschr.. *Haut-Geschl.-Krkh. 44,* 5 (1969).[17]

Radiation is the best-studied and understood of all major pollutants. Nuclear reactors are visible invaders on our landscape, and their control or reduction because of safety, though difficult, seems possible. Small wonder that so much effort has gone in that direction, even though greater hazard lies elsewhere.

The gut impulse – to protect the generations – is correct, and hopeful. It's the only social cause on the roster right now that well-off Americans are willing to go to jail for.

HUMAN GENE POOL

John Gofman and Arthur Tamplin, the major popularizers of nuclear genetic threat, have written: "Changes in the chromosomes of sperm or our precursor cells may be transmitted to all future generations of humans. The heredity of man, his greatest treasure, is thereby at stake. Once irreversibly injured, the chromosomes cannot be repaired by any process known to man."[25]

The Committee on Science and Public Policy of the National Academy of Sciences has declared: "The human gene pool is the primary resource of mankind, today and tomorrow. The present gene pool is the culmination of three billion years of evolution and natural selection."[26]

How large is this greatest treasure, this primary resource? *CQ* reader Rob Roach has volunteered the mathematics on the mass and volume of DNA it took to pass on all the heredity of all the 20 billion *Homo sapiens* of the past and present (4.3 billion are alive now). The grand total, measuring just the information-bearing base pairs in the double helix of human DNA, is 0.08 grams. In volume, 0.2 milliliters.* Less than a teardrop.

While we're at it, what is the value of the human gene pool in 1979 dollars?

A tiny resource, but intricately dispersed, intricately protected, buffered, repaired, renewed. By some accounts our genes do not work for us, we work for them.[27] Consider just the tests the chromosomes must pass during conception and pregnancy. The male ejaculate ranges from 0.5 to 11 milliliters (!) with on the average 80 to 110 million sperm per milliliter. So an average wad has 300 million sperm. Of those, 40% can't swim very well and some 12 to 27% are visibly abnormal.[28] The vast majority never make it to the egg, even if they're deposited in a vagina, which is uncontracepted, and a just-ripe egg is handy. The few hundred who reach the egg perform an elaborate dance around it and then, by an unknown mechanism of selection, one gets through.

Then follows the complex process of fertilization, travel of the quickened egg to the uterus, and implantation there. It is estimated that one-third to one-half of all fertilized eggs do not survive to implant.[29] About 25% of early spontaneously aborted embryos (up to 17 days after conception) have detectable chromosome abnormalities. Such early abortions are usually not noticed; they are lost in what appears to be a late menstrual period. Selection continues through pregnancy – 14 - 17% of fetuses after the fourth week are miscarried or stillborn.[30] Of spontaneously aborted fetuses nearly two-thirds have chromosome abnormalities.[31]

BIRTH DEFECTS

All of that is good news, the working of an efficient and merciful gauntlet. However 7% of babies are born with birth defects – one out of fourteen.* Of those it is thought that 20% are purely genetic, 20% purely environmental (caused during pregnancy), and the remaining 60% an indistinguishable combination of genetic and environmental.[32] Some 2,336 different kinds of birth defects have been identified – many more are assumed to exist.[33]

Here we come to the heart of the matter – the immeasurable and usually hidden suffering that goes with having (or being) a defective child. The event is frequently shattering for the parents. The costs of special medical and educational care are immense, both for the family and the community at large. Though some of the children are cheerful, most suffer from their condition to degrees that can't be quantified – the constant fear of the hemophiliac (bleeder) of any minor accident that could kill, the humiliation in public of the malformed or incompetent, the endless obstacle course of life in a wheelchair. Dependency. Physical pain. Short lifespan. Guilt. Rage. . . .

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* Here's how Rob Roach, of Olympia, Washington, figured it.

Assumptions:
- 20 billion people
- Human DNA, uncoiled, is 1 meter in length
- Each base is about 3.2 Å in length
- Each base has a molecular weight of about 400, or 400 g/mole

So:

$$\frac{1 \text{ meter}}{3.2 \times 10^{-10}/\text{meter (bases)}} \rightarrow 3 \times 10^{9} \text{ bases}$$

Then:

$$\frac{2 \text{ (DNA strands)} \times 20 \times 10^{9} \text{ (people)} \times 3 \times 10^{9} \text{ (bases)}}{6.023 \times 10^{23} \text{ (Avogadro's Number)}} \rightarrow$$

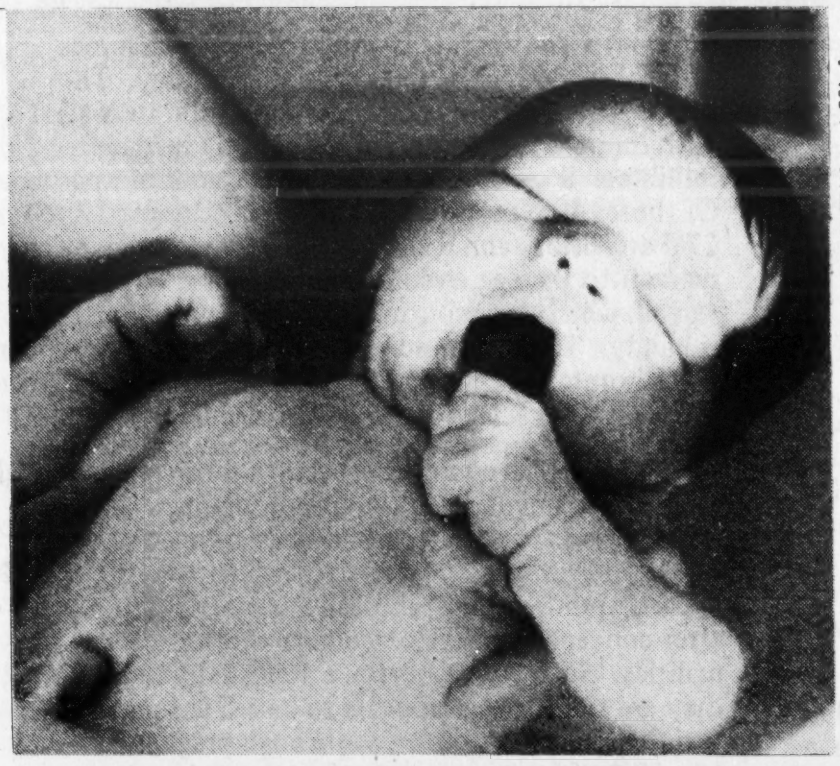
$$\frac{20 \times 10^{18}}{10^{23}} = 20 \times 10^{-5} \rightarrow 2 \times 10^{-4} \times 400 \text{ g/mole} =$$

$$800 \times 10^{-4} = 8 \times 10^{-7} = .08 \text{ grams}$$

or about .02 milliliters.

* That's the March of Dimes figure. Here's their rap:

- 1 out of 10 families knows the anguish that comes with having a birth defect child.
- Every year 250,000 babies are born [in the U.S.] with significant birth defects.
- At least 18,000 infants die in their first year because of birth defects.
- 500,000 unborn babies die as a result of birth defects every year.



Physically normal baby – 93% of births.

Birth Without Violence

THESE ARE NOT EASY pictures to look at. But neither will it be easy to change the habits – personal, commercial, governmental, and military – that are increasing the occurrence of such births.

Many birth defects look far worse than these. I've included only ones that may live past birth and are relatively common. Also left out are the more hidden defects – muscular dystrophy, heart malformations, diabetes mellitus, cystic fibrosis, sickle cell anemia, hemophilia, PKU, and Huntington's chorea. These photos and most information with them come from two excellent medical texts: Keith L. Moore, *The Developing Human,* 2d ed. (Philadelphia: W.B. Saunders, 1977); and David W. Smith, *Recognizable Patterns of Human Malformation*, 2d ed. (Philadelphia: W.B. Saunders, 1976).

The usual image of lethal human folly is the skull. The faces of these children may carry a more accurate impact. Death is an end and space for a renewal – the genes expressed here live on.

Trisomy 18 syndrome

Recognizable Patterns of Human Malformation

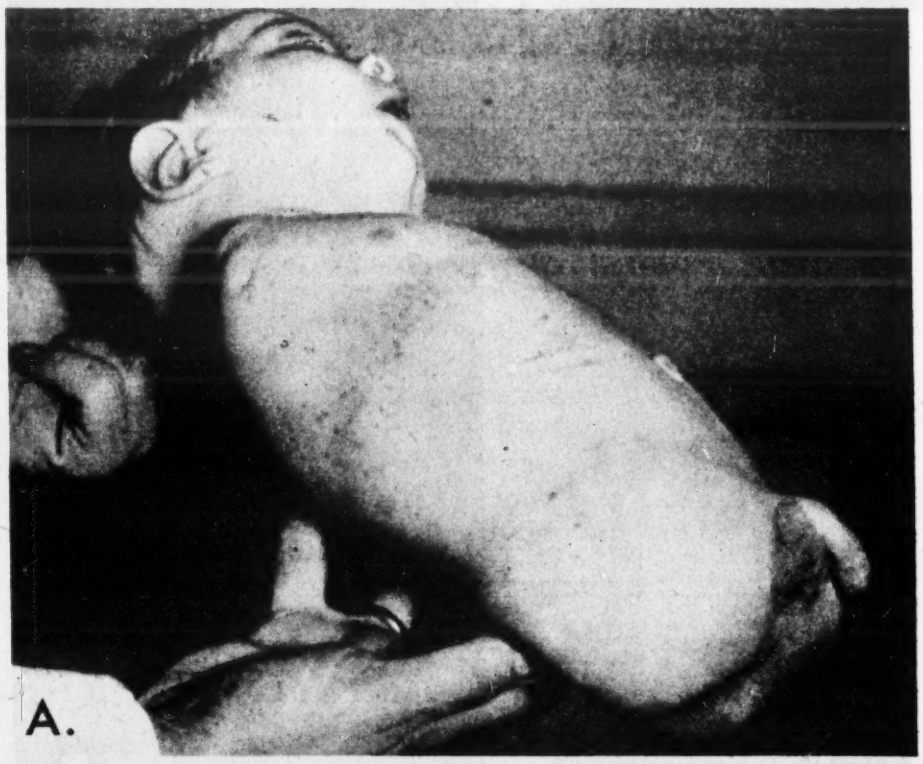
Trisomy 13 syndrome

The Developing Human

As Down's syndrome (see inside front cover) is the result of three chromosomes No. 21 rather than the usual two, these defects result from tripling of chromosomes 13 and 18. Trisomies tend to increase with maternal age, and to some extent the tendency is inherited. The incidence of Trisomy 21 (Down's syndrome) is 1/660, of Trisomy 18 is 1/3500, and of Trisomy 13 is 1/7000. Both of the latter two are severely defective physically and mentally. Most don't survive the first year.

Spina bifida, an externalization of the spinal cord, is one of the commonest forms of birth defect. Incidence is 1/375. In the United States 6,200 newborn a year have either spina bifida or hydrocephalus (below). Many survive birth: 53,000 are alive, under 20, in the U.S.

The Developing Human

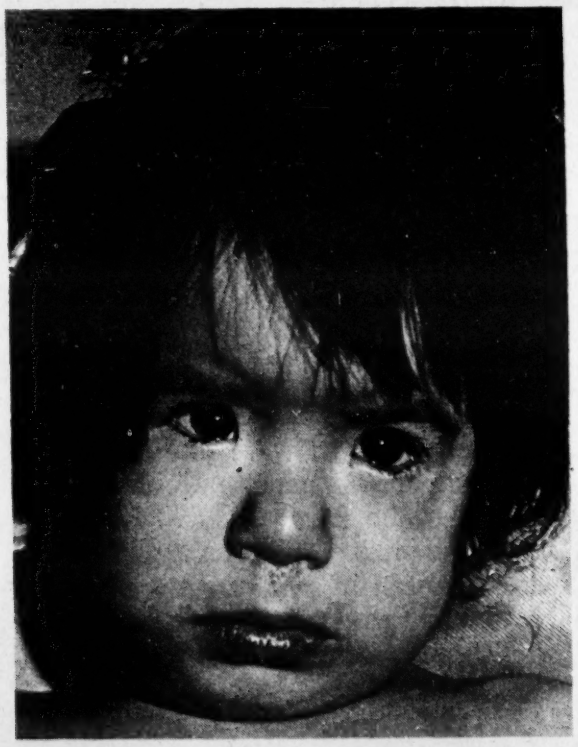


Thalidomide, a sedative prescribed to mothers because of its apparent absence of side effects, caused over 7,000 babies to be born with various degrees of limb malformation. The children are now reaching college age. For more information on this teratogen and how it stayed on the market for a while, see **Suffer the Children**, *reviewed on p. 37.*

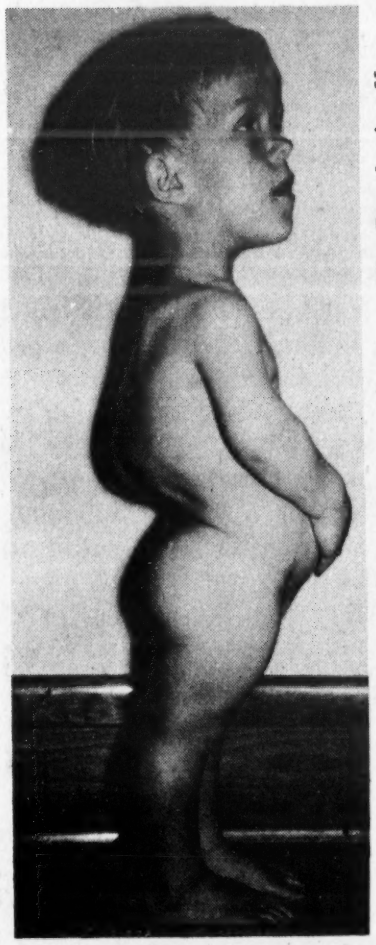
The Developing Human

Hydrocephalus, said to occur in 1/550 births, results from the accumulation of spinal fluid in the skull. Sometimes the condition develops after birth.

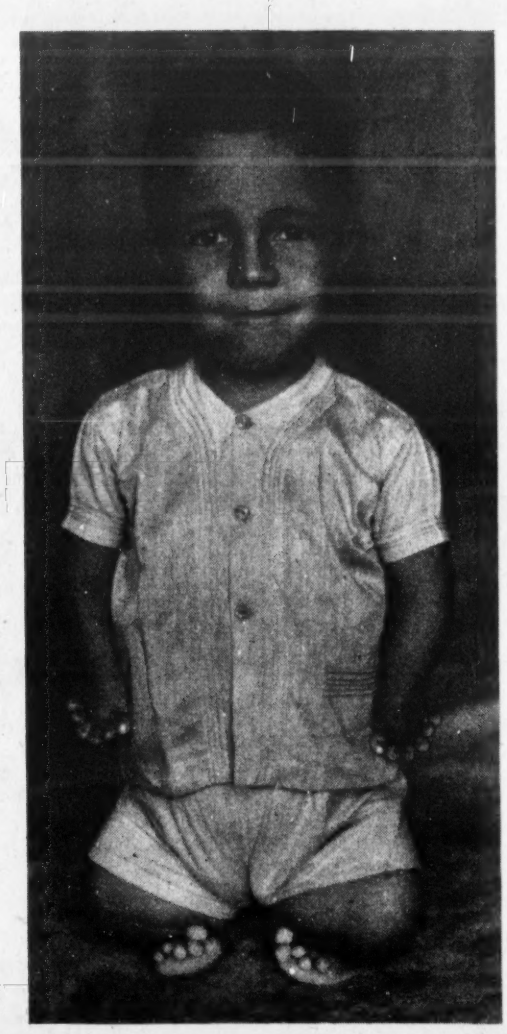
Recognizable Patterns of Human Malformation



Another known teratogen is alcohol. This 2-1/2-year old shows Fetal Alcohol syndrome, resulting from her mother's chronic alcoholism. Such babies have a 17% death rate at birth. The survivors have weak bodies, an average IQ of 63, and possible brain malformation.

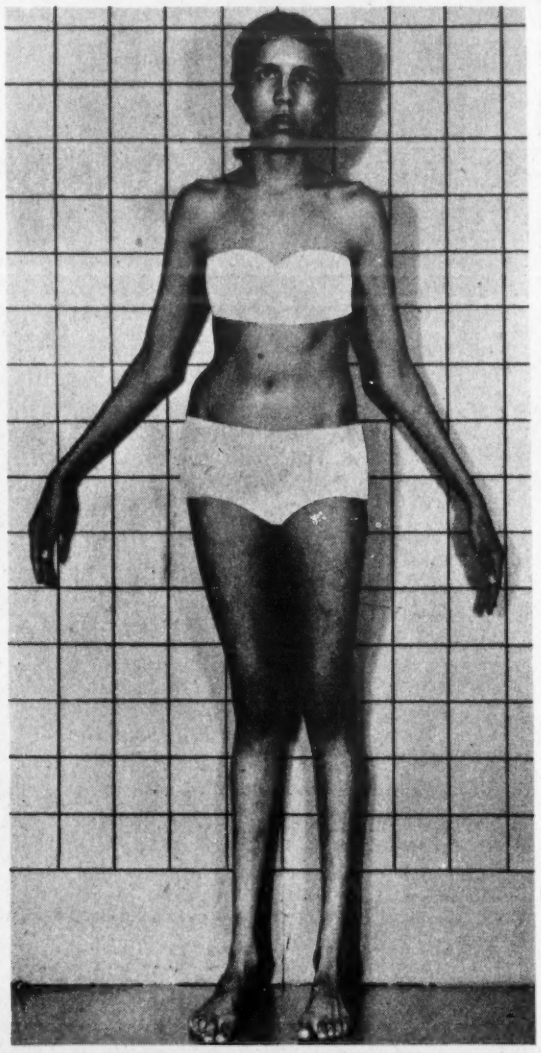


Achondroplasia, a form of dwarfism, results from a dominant gene. Occurrence is about 1/10,000, with about 90% thought to be the product of new mutations. Intelligence is normal. If this child reproduced, half of his children would have the defect.



The result of inbreeding in a Brazilian population, Grebe's syndrome has affected 47 children. Some died in infancy.

Recognizable Patterns of Human Malformation



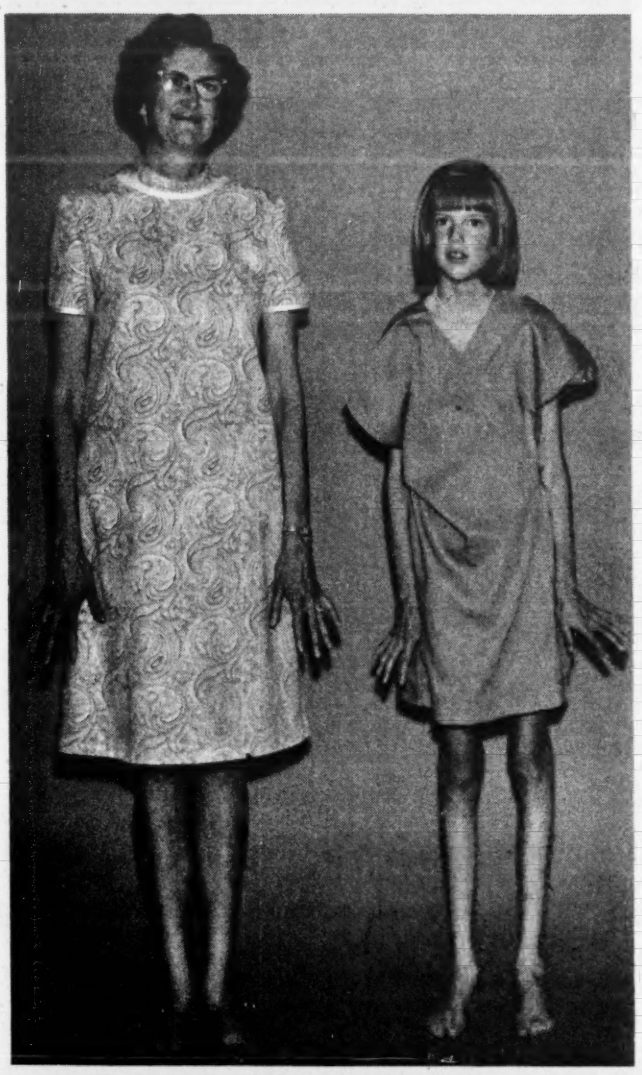
A 16-year-old with Marfan's syndrome, resulting in this case from a new mutation since no other cases were known in her family. Mean age of survival for individuals with the condition is 45.

The Developing Human

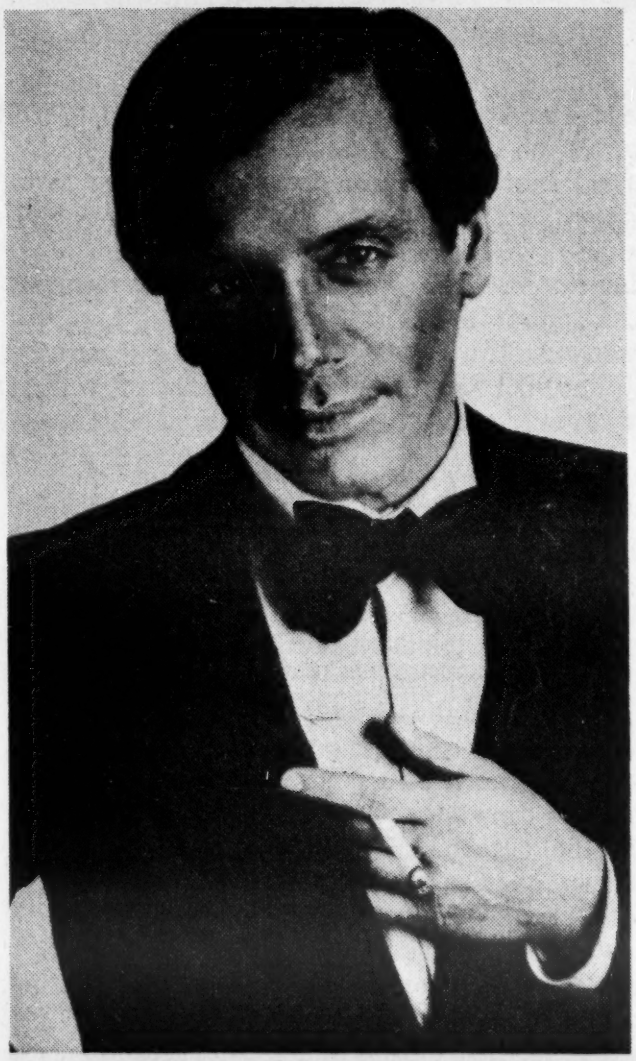
A microcephalic infant has a normal-sized face but underdeveloped cranial vault, leading to severe mental retardation. This defect, sometimes genetic, has also been associated with exposure to ionizing radiation during pregnancy.

Recognizable Patterns of Human Malformation

Turner's syndrome – a ten-day-old female possessing only one X chromosome instead of the usual two. The child will grow up with short stature, perhaps mild mental retardation. Incidence is 1/5,000.



Mother and daughter with Marfan's syndrome.



Normal adult.

GENETIC LOAD

Call the lives of the born-defective the social load. They are the bodily expression of what is termed the genetic load, which measures the loss of fitness of a population due to the harmful mutations carried in its gene pool.

Not all mutations are harmful, but since they amount to random jiggering in a complex delicate process, the great preponderance are deleterious, some are neutral, and a tiny fraction may be advantageous. Also most mutations are recessive – they are expressed only if both parents have the same recessive trait. In freshman Biology: *Aa* x *Aa* (the carrier – heterozygous – parents)→*AA* (the dominant homozygote) and *Aa, Aa* (more carrier heterozygotes) and *aa* (the recessive homozygote child, expressing the otherwise hidden trait).

Harmful recessive mutations – once they occur it is practically impossible to remove them from the gene pool. They don't increase, but neither do they decrease. Even if the trait is lethal in the recessive homozygote (*aa*), it hides and persists nearly indefinitely in the heterozygotes. That's not all bad – such variability in the gene pool might be useful if conditions for the organism change. Some of the genetic load is insurance.

But most of it is pure load. All of us carry a dozen or so lethal recessive genes that won't show up unless we mate with someone with a matching recessive (Ref. 26, p. 910). That occurs more often with inbreeding groups such as small island populations and religious sects, and even more in consanguinous marriages such as between cousins. Outbreeding therefore conceals new recessive mutations. These days, when nearly anyone can mate with anyone anywhere, such mutations may be assumed to be collecting invisibly, to be expressed much later (and perhaps more harmfully then, for reasons to be seen).[34]

That's what's maddening about human genetics. Nearly everything is expressed so much later – generations later – that you can't track anything back to its causes. Some nuclear enthusiast non-biologists have rejoiced that not many mutations turned up in the children of the bombed in Hiroshima and Nagasaki. They wouldn't – not until the third generation and then only if cousins marry. The mutations are there – recessive, unremovable. And when eventually they turn up they'll be indistinguishable from all other mutations except that statistically there'll be more.

Mutations vary in their harmfulness. Some are lethal when expressed – kill the embryo before birth. Some are sublethal – they live past birth and may even reproduce, but they have "reduced fitness." Others may be subnoticeable – more on that later. One fascinating idea of genetics is the Haldane-Muller principle: Each individual harmful mutation is in the end equally harmful – a lethal gene kills right away, a sublethal spreads its harm over a number of generations. As Garrett Hardin points out, in a growing population such as ours, "The less harmful genes exact a greater numerical toll than the more harmful, because a larger proportion of the loss is postponed to the later generations when the population is larger." (Ref. 34, p. 267.)

[more→]

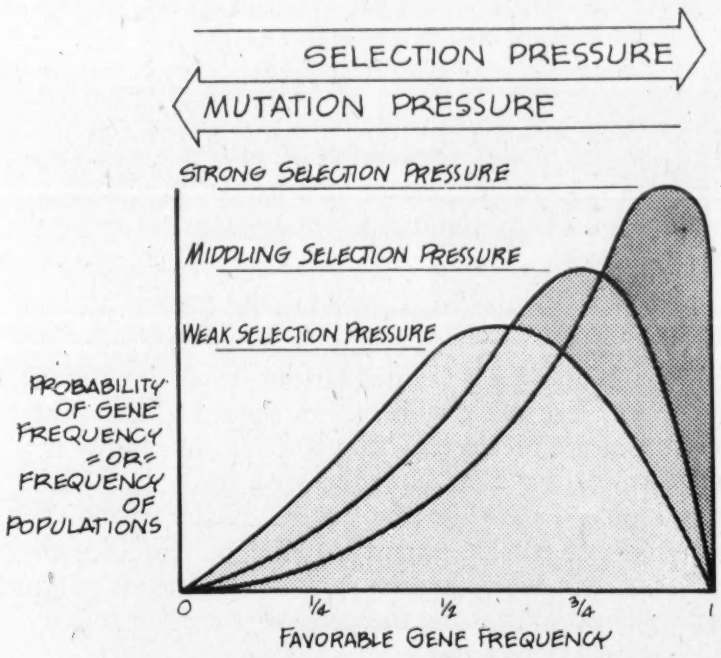


Figure 10. "Survival of the fittest," if it were true, would dangerously limit an organism's variability. "The fittest is favored" more closely approximates biological reality – maximizing the advantage of a favourable gene while keeping a reserve of some variability. If there is less selection pressure, then "favorable" is less strongly favored, and more variability is expressed. The same happens with increased mutation rate – a decreased proportion of favorable genes. Humans are simultaneously lowering their selection pressure and increasing their mutation rate – decreasing favorable genes on both counts. (From Garrett Hardin, Nature and Man's Fate, *ref. 34, p. 232.)*

MUTATION RATE

Dominant harmful mutations also occur, and since they are expressed and selected against right away, the ones that show up are usually recent.[35] With dominants then, as with sex-linked aberrations that are distinct because they're in the *X* chromosome, you can get a better idea about the mutation rate than you can with recessives.

It's low. The average mutation rate per gene per generation is estimated at 1/1,000,000 (Ref. 35, p. 107) to 1/100,000.[36] So what are we worrying about? One in a million is long odds. Besides, all you're doing is adding a little additional variability to an enormous pool of genetic variability already in the population – some say the existing variability is 5,000 times greater than is added by mutations to a single generation (Ref. 36, p. 72). (That's why mutation rate has scant effect on the rate of evolution, which runs on variability.)

The problem is that most mutations are harmful and they can't be corrected, they have to be selected out, which takes time. And look at the whole picture: "Among hundreds or even thousands of genetic diseases and malformations known in man, most have an incidence of 1:10,000 or less. Taken all together, these defecits nevertheless add up to a genetic load which is by no means negligible." (Ref. 36, p. 108.)

It's getting foggy (it will get worse) – no one seems to know exactly how harmful an increase in human mutation rate is. Referring just to radiation, H.L. Carson in the new *Encyclopaedia Britannica* article on Human Genetica writes, "There is a general dread that a doubling dose of radiation to the human population of the world would end in major calamity."[37]

Nobel geneticist Joshua Lederberg said in 1970:

> I believe that the present standards of population exposure to radiation should and will (at least de facto) be made more stringent, to about one percent of the spontaneous [mutation] rate, and that this is also a reasonable standard for the maximum tolerable mutagenic effect of any environmental chemical (better for them in the aggregate) . . . A ten percent increase in the existing "spontaneous" mutation rate is, in effect, the standard that has been adopted as the "maximum acceptable" level of public exposure to radiation by responsible regulatory bodies. (Ref. 25, p. 186-187.)

Bruce Ames recently asked, "If there were a doubling in human genetic birth defects, would we know it? Is that being studied?"

Last August in Moscow, Nikolai Dubinin, head of the Soviet Institute of General Genetics, speaking to over 2,000 geneticists at the International Congress of Genetics declared that the percentage of children in the world born with birth defects has doubled over the last 25 years, largely because of increase of mutagens in the environment. "This shows that the human race and human heredity are entering a dangerous phase."[38] (By reputation, human genetic epidemiology in the U.S.S.R. is ahead of ours.)

On this subject environmentalist/scientist Paul Ehrlich draws a clear distinction between what should be said politically and what can be said scientifically. Political: "Doing anything that spontaneously increases the mutation rate in *Homo sapiens* is a dumb idea." Scientific: "It's very difficult for me to see exactly what kind of statement can be made about what the human population consequences of the level of circulation of mutagens – or of radiation for that matter – is likely to be. It's a very difficult technical problem."

About non-human species Ehrlich has more certainty: "The argument for protecting nature by reducing mutagens is a crappy argument. In a *Drosophila* [fruit fly] population or a lizard population if you have a dose of radiation that causes a very high genetic load, selection will quickly reduce it. A *Drosophila* population doesn't go into shock if it loses half of its individuals or 90% of its individuals in a generation or for 20 generations. That would be tough for *Homo sapiens.* If humanity could accept a selective mortality of 90% for 20 generations, we wouldn't have to worry about mutagens increasing our genetic load."

What's the difference between us and lizards? Self-interest obviously. Culture perhaps – is civilization, language, prolonged child-rearing, etc., more or less vulnerable to increased genetic load? I don't know of any formal speculation on that one. But one difference we're sure of, selection pressure on humans is lower than on other species. We've lowered it ourselves, first through the agricultural revolution, then through the industrial and medical revolutions. Albinos, bleeders, genetic dwarfs, the born-blind, deaf, or feebleminded can survive now, and some reproduce. Former lethal defects are made sublethal, former sublethals are made almost normal, somewhat unfit are made fully fit. That's immediate humanitarian good news, long-term genetic bad news. Instead of being selected out, deleterious genes are accumulating.*

* This is not exactly an original fret. It dates back to Francis Galton in 1865 and has had a number of distinguished and undistinguished (A. Hitler et al.) proponents since then.

National Academy of Sciences:

> Having thwarted the historical process of natural selection against our disadvantageous genes, civilization must now provide an acceptable substitute. . . . As medical euphenics ("eu" = well, "phen" = appearance) becomes increasingly successful, it will become increasingly important that genetic counseling be universally practiced. Otherwise, in a few generations, the ethic which guides medical practice will have seriously damaged the heritage of countless previous generations. (Ref. 26, p. 911.)

SUBNOTICEABLE SUBLETHAL MUTATIONS

Knowledge of human genetic epidemiology – who has what – is sufficiently imprecise that numerical estimates have a way of varying tenfold, at least in the issues we've addressed so far. Now let's proceed to where there are no agreed-upon numbers at all – genetic effects on general fitness, behavior, intelligence, and such.

Geneticists have good reason to be leery of this subject, as it leads promptly to endless arguments over nature/nurture (genetic inheritance vs. upbringing), race and IQ, etc. The arguments are endless because they are based as much on articles of faith as on the scanty, blurry data. We'll skip the argument and report the general agreement that there is "some" – unquantified – genetic component to IQ (Ref. 35, p. 618), to schizophrenia (Ref. 35, p. 623), and most disease. To some degree in this domain, genetic like begets like.

I'm calling these traits, which *may* increase with higher mutation rate, "subnoticeable" because you don't know at its birth that you've got one and you don't know later when you do have one whether it's genetic or not – that's four ignorances stacked up right there. It leads to an ignorant assertion: if selection pressure is reduced against subnoticeable sublethal traits the unfavorable traits will gradually increase, particularly if mutation rate is increasing.* I can't prove it. You can't disprove it. We both can worry about it – it's vague all right, but as clouds go it is large and dark. Are we accumulating sublethal genes for which humanity may pay a high price in the future?

Disease is worth a closer look. A good summary of the situation may be found in "Environmental Mutagenic Hazards," a special paper prepared by the Council of the Environment Mutagen Society and printed in *Science* in 1975:

> Many geneticists believe that man's genes constitute his most precious heritage, and that a deterioration in gene quality can result in a corresponding decrease in the quality of life. Steady progress in the control of infectious diseases, lengthening human life spans, and improved procedures for identifying genetic disorders have revealed an important residue of genetic disease in human populations. An impressive proportion of hospital admittances, for instance, are now recognized as reflecting genetic disabilities.[39] The prospects for directly curing the resulting genetic diseases, in contrast to merely alleviating their symptoms, are poor, and are not likely to improve in the near future. Furthermore, the wide variety of mechanisms by which radiations and chemicals induce mutations[40] make it very unlikely that generalized schemes can be devised to protect against mutagens, except by avoiding them in the first place.[41]

* Ehrlich puts it more precisely: "The proportion of deaths caused by selection in human populations is vastly lower than in most other species. . . . The reproductive differentials between genotypes that are the essence of natural selection are probably smaller today in *Homo sapiens* than in the past."

CHEMICAL TERATOGENS

More fuzziness: you often can't tell a genetic birth defect from one caused during pregnancy – "the mechanism initiated by the genetic factor may be identical or similar to the causal mechanism initiated by an environmental teratogen." (Ref. 29, p. 123.) Furthermore, the same substance may cause both. That makes sense. If a mutagen is also probably a carcinogen, then it's also likely to be a teratogen. The cells in an embryo are multiplying rapidly and fragilely – DNA disruption is bound to be disastrous to the development.

(Of course there are a number of teratogens that don't cause mutations or cancer – mostly infectious agents such as German measles or herpes simplex [Ref. 29, p. 139]. Perhaps if the term "genotoxic" comes into common use to link the meaning of mutagenic and carcinogenic, it should also cover part of teratogenic, and a new term should be coined for the non-DNA-disrupting causes of birth defects.)

If the case can be at least loosely made that teratogens overlap with other genotoxins, then birth defects and miscarriages can be studied as a human indicator of exposure to widely dangerous substances. More and more of the scientific literature (for example *Science, Science News, New Scientist*) is doing exactly that. So far it's the only avenue of direct evidence we have that mutagenic chemicals are in fact harming the human gene line, and still all we have is hints and glimpses.

The wives of vinyl chloride workers have a significantly higher rate of fetal deaths, or miscarriages. The 70 exposed husbands studied and the 95 control husbands (working with other chemicals) had a 6 - 7% fetal death rate in their families before exposure. The vinyl chloride workers had a 12 - 20% fetal death rate after exposure – double to triple that of the control group.[42] Vinyl chloride is clearly mutagenic on the Ames test and other short-term tests and is a carcinogen in rats and people.

An exhaustive survey of nearly 50,000 operating room personnel (compared with 24,000 other hospital workers) has shown that waste anesthetic gases are affecting women and men. The results, corrected for age and smoking habits, show a 50% to 100% increase of miscarriages and birth defects (and a 30 - 90% increase in cancer) with the exposed women. Wives of the exposed men had a 25% higher rate of birth defects – "this unexpected finding represents a matter for serious concern and deserves further investigation." The study was made because of preliminary reports that miscarriages were more frequent among operating room women. Venting systems are now being installed in operating rooms.[43]

Enter "Behavioral Teratogens – Birth Defects of the Mind," as reported by Gina Bari Kolata in *Science*, 17 November 1978. Some excerpts:

> To many people, the idea that children may have lower intelligence or impaired behavior because they were exposed in the womb to certain drugs or foreign substances is at least as disturbing as the idea that they may be physically deformed. . . .
>
> Behavioral teratologists are looking for subtle and common defects – shorter attention span, lower intelligence, or hyperactivity, for example. . . .
>
> The implication of obstetric medications as behavioral

teratogens may have far-reaching consequences because these drugs are so commonly used. In a recent colloquium, Yvonne Brackbill of the University of Florida estimated that women are given medications in 95 percent of all labors and deliveries in this country. . . . When the babies in these studies were tested at 4 months, 8 months, and 12 months of age, those whose mothers were heavily medicated lagged in their development of the ability to sit, stand, and move about. They were also deficient in developing inhibitory abilities, such as the ability to stop responding to redundant signals, to stop crying when comforted, and to stop responding to distracting stimuli. As they grew older, their development of language and cognitive skills lagged or was impaired. . . .

It is now clear that behavioral defects can occur in the absence of physical malformations. Moreover, the fetus is vulnerable to brain damage throughout gestation – there is no safe period. Finally, drugs that in high doses produce physical malformations often produce behavioral defects in lower doses. . . . Possibly women have already been exposed to a behavioral teratogen comparable to thalidomide in its potency. But, unlike thalidomide, the effects of such a behavioral teratogen would have gone unnoticed in the general population.[44]

The teratologists and psychological testers have only recently found each other and combined their skills. May they soon link up with genetic epidemiologists and environmentalists and test the children of vinyl chloride workers, nuclear industry workers, farm workers exposed to pesticides, and forest industry people and Vietnam vets exposed to herbicides. Maybe they'll find nothing.

That's it, that's the argument – from mutagens to carcinogens to teratogens to behavioral teratogens, with a lot of uncertain genetics thrown in. We know that the human mutation rate and genetic load is increasing. We know that selection pressure is decreasing. We don't know quantities or much about causes or anything about consequences.

The Range of Mutagenic Potency in the *Salmonella*/Microsome Test

	Revertants/nmole	Ratio
1,2-Epoxybutane	0.006	1
Benzyl chloride	0.02	3
Methyl methanesulfonate	0.63	105
2-Naphthylamine	8.5	1,400
2-Acetylaminofluorene	108	18,000
Aflatoxin B_1	7,057	1,200,000
Furylfuamide (AF-2)	20,800	3,500,000

Mutagens vary enormously in their potency, as shown in this table from McCann and Ames' paper in Origins of Human Cancer *(ref. 3, p. 1435). When potency varies by a factor of millions it must figure centrally in the decisions about which genotoxic substances to control first and to what degree. The next major task in mutagen/carcinogen testing is to reliably and accurately* quantify *potency in suspect substances in terms of potential human harm.*

RESPONSIBILITY

Bruce Ames commented to Paul Ehrlich, "If the smokers are filling the gene pool with mutations and their children are going to marry your children, then one has to really think about the societal responsibility. It isn't only a matter of individual choice."

Ehrlich replied, "Bruce, you have as much to do with my thinking on this as anyone. If it is true that mutagenicity and carcinogenicity are caused by the same kinds of phenomena, the problems perceived by human beings will always be much more serious on the cancer end, because before you would get a level of mutagenicity that would make much difference to the 'gene pool' everybody would be dying of cancer. So biologists tend not to be very concerned with the quality of the human gene pool whereas the social load of cancer is enormous."

Ames retorted that the social cost of a defective child lasts a whole lifetime whereas cancer is in general a disease of old age. And a harmful gene will be harmful generations after the cancer patient is out of the picture.

The fact is, whether you're more worried about cancer or genetic damage, we have both and both are increasing. If you smoke and you're my friend I'll look at you with one kind of dismay; if you're my mother-in-law I'll look at you with another.

In any case it would be well if more prospective parents sought genetic counseling and if more doctors were trained in it. (For a trot by the general advice, see p. 26). Nobel geneticist Hermann Muller, known for his enthusiasm for eugenics, made this fair statement:

What is most needed in this area of living is an extension of the feeling of social responsiblity to the field of reproduction: an increasing recognition that the chief objective of bringing children into the world is not the glorification of the parents or ancestors by the mere act of having children but the well-being of the children themselves and, through them, of subsequent generations in general.[45]

What this article should have demonstrated is that far more than just the parents are involved in that responsibility.

Of course, we could wait for a cure for cancer and a corrective for mutations. It may be a long wait. DNA damage is on the molecular level. How would you detect which body cell or which germ cell is the critical defective one, and which gene is defective, and what the defect is – before they're expressed? Then how would you reach in, with what tweezers, and make what correction and keep the whole mess alive? As they say, genetic disease resists treatment.

Well then, how about eugenics? We could keep our mutagens and embark on a national/world policy of active favorable selection, or, if that sounds too Hitlerian, settle for comprehensive negative eugenics. Sterilize workers exposed to high levels of mutagens and provide a hazardous-duty fund for their later cancer treatments. Sterilize everyone who survives infancy with birth defects. Sterilize people who are kinda dumb. Be sure never to be racist, sexist, ageist, or elitist.

Folksinger Woody Guthrie died long and slow of Huntington's chorea – a sublethal dominant genetic disease of the nervous system brought to this country by just three immigrant families from England. It has affected 7,000 individuals since then. If Woody had been sterilized or genetically counseled not to repro-

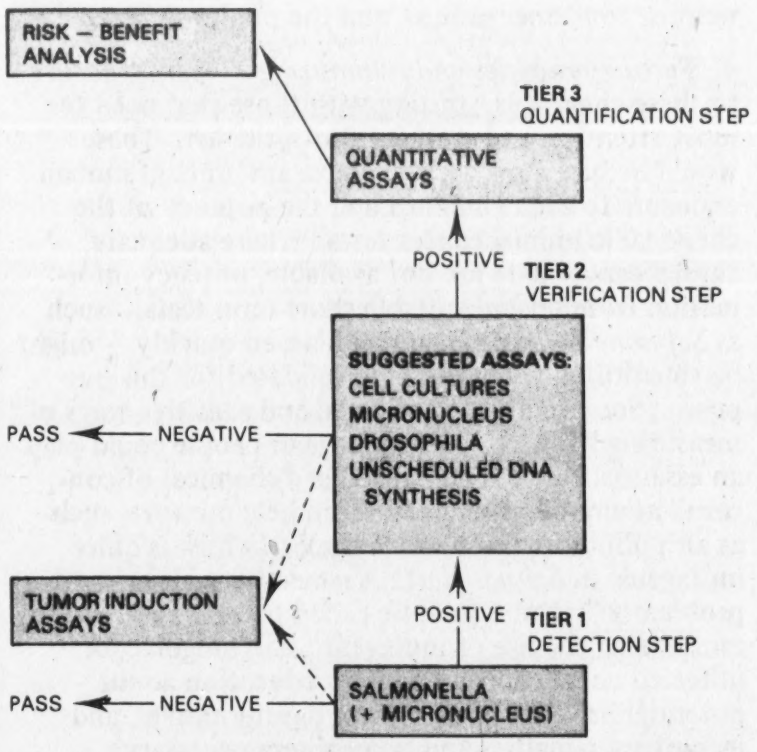


Figure 11. Proposed sequential test procedure for genotoxic substances. The "quantification step" has yet to be worked out. From Ambio *(ref. 8, p. 247).*

duce, there would be no folksinger Arlo Guthrie. Should Arlo have had kids?

Genetic responsibility is just entering public consciousness. We'll be decades, perhaps centuries, sorting out its rights and wrongs. Better for now to concentrate on reducing the mutagenic hazards.

ACTION – PERSONAL

For both reasons, lay off items that appear to cause cancer – cigarettes, hair dyes, nitrites in meats (that's one I've just dropped thanks to all this), unnecessary x-rays, unnecessary anesthetics, chronic alcohol or drug use, pesticides, herbicides, moldy nuts, charred meat or fish, too much fat, food additives generally, medical drugs generally including birth control pills, aerosol cans, cleaning agents with benzene or chlorinated compounds (carbon tetrachloride, trichlorethylene, etc.), asbestos insulation, wallboard, etc., and whatever else turns up on the endangering list. (Ref. 22, pp. 429-269.)

If you're pregnant, take this list quadrupally seriously.

As for political action, the usual: research, bitch, organize, boycott, demonstrate, publicize, vote, help, and thank.

Has your local population had a sudden rise in babies born dead with spina bifida associated with increased local herbicide spraying? Nail one of them to the door of the agency responsible.*

ACTION – COMMERCIAL

Here's three quick stories from Arthur Lubow's 1977 article on Bruce Ames in *New Times:*

1) When American Cyanamide found that an agricultural chemical tested weakly positive on the Ames test, it was able to identify and eliminate the guilty contaminant. Merck Sharpe and Dohme, which has been using an Ames screening test for the last three years, also discovered a slightly mutagenic impurity in one of its drugs. The impurity has been removed, although it has not yet been identified.

2) Bruce Ames stumbled on Tris while buying pajamas for his two small children. He noticed that the pajamas were flame-resistant, and wondered what chemicals had been added to the cloth. Calling his friend Mike Prival, who was then at the Environmental Protection Agency in Washington, Ames learned that the chemical was named Tris. Tris was already on the EPA list of suspect carcinogens, and Prival had added it to a list of compounds being run through an Ames test as part of a general validation study of bacterial assays. "I was surprised when Bruce called, because I didn't know that anybody outside our small group was concerned about Tris," Prival recalls. "Although, from its structure, you would think it would be pretty bad, certainly if you had a background like Bruce's."

On the EPA Salmonella test that had been underway before Ames called, Tris tested positive as a mutagen. The chief of Prival's section wrote a letter to the Consumer Products Safety Commission in October 1975. The commission required the use of Tris to flame-proof children's sleeping garments. "We informed them that we had found Tris was mutagenic in the bacterial test," Prival says. The commission began investigating absorption of Tris through the skin. At the same time, the NCI was conducting animal assays of Tris. The NCI report implicating Tris as a carcinogen was announced early in 1977, after Bob Harris of the Environmental Defense Fund pressured NCI into releasing it. A few weeks later, the Consumer Products Safety Commission announced its in-house study showing Tris absorption through the skin. The chemical was banned as a flame retardant in children's clothing – about a year and a half after it had been identified as a probable carcinogen by the Salmonella test.*

For that year and a half, millions of children slept in Tris-coated pajamas, soaking up the chemical when they sweated, when they chewed on the cloth, when they did nothing but lie still. Because the scrotum is particularly absorbent, it sponged up more than its fair share of Tris. Ames fears that the Tris generation of boys may suffer an unusually high rate of sperm cell genetic damage, and possibly testicular atrophy and sterility. "The more we looked at Tris, the more dangerous it seemed," he says. "In hindsight, it was a crazy idea in the first place. Related compounds were known to be carcinogenic, and the structure of these compounds suggested they could be." For a year Ames, Prival and Harris tried without success to get the commission to do something. "These government bureaucracies are very slow to react," he says. He is today fighting the almost incredible plan to substitute inadequately studied Tris-related substances as flame retardants in children's clothing now that Tris is banned. "The replacements they're using look bad," Ames says. "I don't like the whole idea of add-on flame retardants of this type. I've been on the phone to all the commissioners and I think they're coming around, but I think they're hemmed in by what their powers are."

3) If a new carcinogen is substituted for an old one, it won't be the first time. One of the saddest ironies in the annals of cancer prevention is the case of decaffeinated coffee. In February 1976 the NCI found that trichloroethylene, a solvent used to decaffeinate coffee, was weakly carcinogenic in mice. "Trichloroethylene is about the weakest carcinogen, with the possible exception of saccharin, that has ever been found in animals," say Ames' colleague Joyce McCann. Because trichloroethylene is so non-toxic, enormous doses of it could be fed to laboratory animals. When megadoses were pumped into mice through a stomach tube three times a week, tumors appeared in a significant number of animals. "When we

* Would I actually do this? I wouldn't. Someone else might, and people in the relevant companies and bureaucracies should be thinking about that.

* As a result of this experience corrective staff and policy changes have been made at the Consumer Products Safety Commission.

GETTING INFORMATION & TESTS ON GENOTOXINS

You're not going to be able to do an Ames test in your basement. If you're determined to do local testing, look into having a nearby academic laboratory get in touch with Ames' lab (Dorothy Maron, Dept. of Biochemistry, Univ. of Calif., Berkeley, CA 94720) for *Salmonella* test strains. Perhaps local environmental groups and academic laboratories could do a joint testing program on local pollutants. But first you should know what has already been tested. Vincent Simmons, head of Microbial Testing at SRI International, recommends three good sources of information. First, the Environmental Mutagen Information Center (at Oak Ridge National Laboratory, Box 4, Bldg. 9224, Oak Ridge, TN 37830 — contact John Wassom) which has up to date information on what substances have been tested and the results. Next, there's the 18 volumes of *Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Humans* (get them from International Agency for Research on Cancer, World Health Organization, CH-1211, Geneva 27, Switzerland, or a good technical library). The monographs have data on 30,000 chemicals, including uses, manufacturers, tests, test results, and references. As for access-to-testing, get "A List of Mutagenicity Testing Laboratories in the U.S." (from National Institute for Environmental Health Sciences, Research Triangle Park, NC 27709). If you think you're on to something dangerous, the government entity that now has primary responsibility for such matters (including *ecological* effects of chemicals) is TSCA — Toxic Substances Control Act — as administered by the Office of Toxic Substances in the Environmental Protection Agency, 401 M St., S.W. Washington, D.C. 20460. For other sources of information, see also pp. 32 and 35.

started this test, we didn't know that trichloroethylene was used as a solvent for decaffeinating coffee," says NCI's Elizabeth Weisburger. "After we published a technical report, General Foods contacted us."

Under the recently celebrated Delaney clause, which required the banning of saccharin, any trace element of a carcinogen like trichloroethylene in Sanka, however weak, would be forbidden. General Foods didn't wait for the FDA to issue a regulation. It quickly switched from trichloroethylene to another industrial solvent, methylene chloride. It was going from bad to worse.

"One needs only to look at the structure of these chemicalls," Joyce McCann says in exasperation. "There are plenty of chemists at General Foods, and they can look at these chemicals and draw the same conclusions we do. Yet there is this attitude that seems to throw all caution to the winds, and to use this chemical until it is proved to be a carcinogen. It seems so irresponsible." As Ames observes: "Trichloroethylene has been replaced by methylene chloride, which is more mutagenic than trichloroethylene on the Salmonella test, but which hadn't had a cancer test done on it." A paper soon to be published by Paul Price of Microbiological Associates in La Jolla reveals that methylene chloride is two to three times as potent in malignantly transforming rat cells as the discontinued trichlorethylene. (Ref. 16, p. 30-33.)

Until business learns to serve the whole customer it will be regarded as an untrustworthy and dangerous adversary by consumers, workers, and the government.

ACTION – GOVERNMENT

Ames: **The problem of cancer and genetic birth defects can be usefully attacked by prevention. The following approaches are suggested.**

1. *Identifying mutagens and carcinogens* **from among the wide variety of environmental chemicals to which humans are exposed. All approaches must be used: human epidemiology for cancer and genetic birth defects; animal tests for cancer and for genetic birth defects; short-term mutagenicity and transformation tests; and new approaches based on measuring damage in people must be developed.**[46,47]

2. *Pre-market testing* **of new chemicals to which humans will be exposed. We have seen, and will continue to see, the folly of using people as guinea pigs.**

3. *Making information* **more easily available on chemicals capable of causing cancer and mutations (including their relative danger where this is known) for use by the state and federal governments, industry, unions, consumer groups, and the public at large.**

4. *Setting priorities and minimizing human exposure* **to these chemicals, starting with those that need the most attention and working down the list. These would be based on the respective amounts of human exposure to each chemical and the potency of the chemical in animal cancer tests. Where adequate animal cancer data are not available, potency information from *several* suitable short-term tests – such as *Salmonella*, which can be obtained quickly – might be substituted when they are validated for this purpose. (Soon more sophisticated and sensitive ways of measuring DNA or other damage in people could play an essential role.) The particular "chemical of concern" at any one time may often be a mixture, such as air pollutants from auto exhaust (which is quite mutagenic in *Salmonella*). A general attack on a problem may sometimes be called for, for example, minimizing the use of mutagenic, carcinogenic, or untested chemical pesticides by education about potential hazards, product use, or alternatives, and incentives, penalties and taxes where necessary.**

ALLIES

As occupational exposure to genotoxic chemicals is probably the greatest hazard right now, labor unions have a primary responsibility and capability. Alliance with their efforts by environmental groups would be poignant (given past disagreements) and probably highly effective.

The politicians and medical heavyweights who managed to channel billions of dollars into curing cancer should not find it difficult to re-channel their efforts into prevention. The apparatus is in place. All that's needed is better aim. Signs are it's already happening.[48]

The highly capable veterans of battles with nuclear energy can use the same skills and commitment against the subtler, greater hazard of chemical mutagens. There's no need to switch targets, just go at the whole problem.

The health food nuts, who were right all along, can avoid smugness by further refining their research and expanding their activity. As an informed electorate and vast consumer population, they may have more leverage than they realize.

How about the Right-to-Life people? A human-caused increase in spontaneous abortions should be of interest to them.

And keep an eye out for artists who translate the hidden into the obvious. DEVO, for instance – the thinking man's punk rock band. Expounding "The Truth about De-evolution," these spuds, these robotoid Rollerball corporate clones, these happy mongoloids have a lively deadly music for you. Each concert begins with a litany. The band demands:

"ARE WE NOT MEN?"

And we in the crowd reply in a numb mechanical mass-market singsong:

"WE ARE DEVO."

Maybe so. ■

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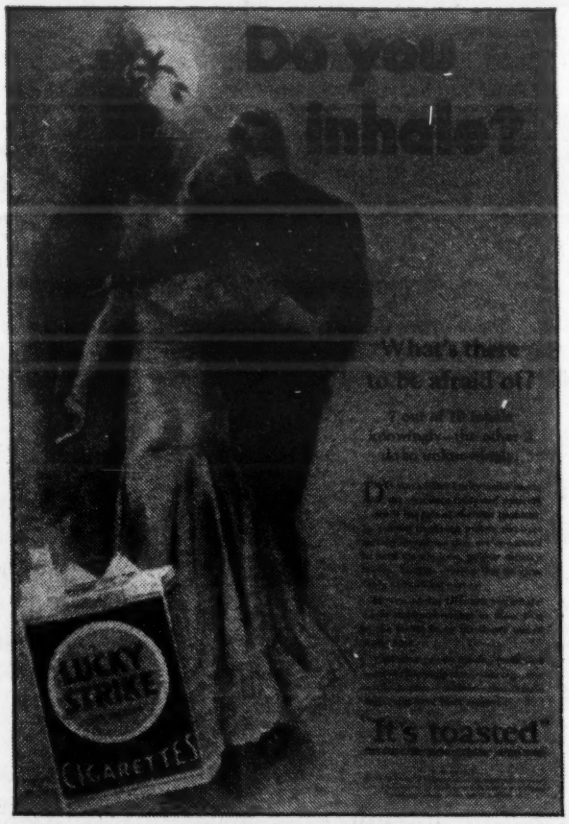

Cigarette ad, 1932.

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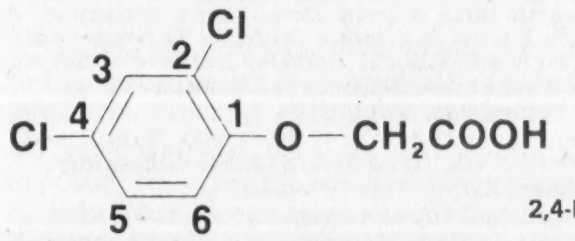
Herbicides: A Faustian Bargain

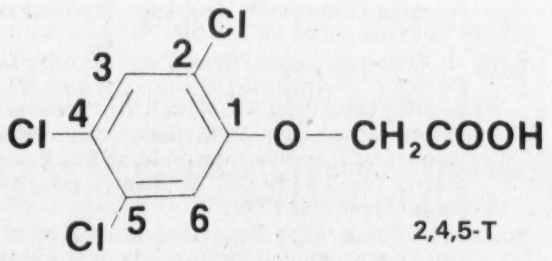
BY CAROL VAN STRUM

We've made a Faustian bargain with our chemical world. Now we have to learn enough so we can cut our losses.

–Irving K. Selikoff, founder of the Environmental Sciences Lab at Mt. Sinai School of Medicine, N.Y.



2,4-D

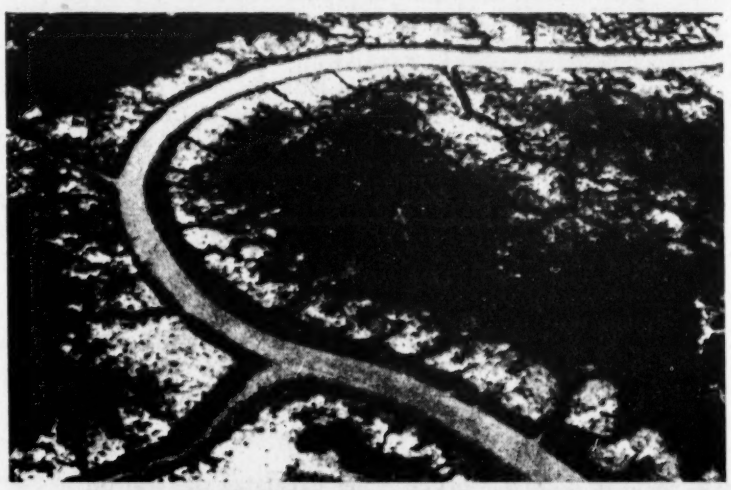


2,4,5-T

VITAL AS THE TESTING of new and unknown chemicals is to human and environmental health, and hopeful as are the new methods for both determining hazardous substances and detecting minute residues of them, the question remains whether reason and responsibility will ever prevail over greed.

The genetic hazards of chlorinated hydrocarbons have long been known, yet their manufacture and use continue unabated. Hexachlorophene, a TCDD-contaminated derivative of trichlorophenol, is still used widely in cosmetics, hospital scrub products and disinfectants, and was until recently used indiscriminately on newborn children. The latter use, at least, was halted when it was discovered that hexachlorophene, absorbed through the skin, caused brain damage to infants, but studies in Sweden also show an alarming increase of congenital malformations in infants born to nurses who wash frequently with hexachlorophene products.[1] The sole producer of hexachlorophene is Givaudan & Cie; it was their factory in Seveso, Italy which released a toxic cloud of TCDD over that town in 1976.

The common wood preservative Pentachlorophenol (PCP) is a known mutagen which is used almost ubiquitously. Residues of it have been found in 85% to 100% of urine and – most alarmingly – 100% of seminal fluid samples from both rural and urban dwellers. These samples also yielded residues of 2,4,5-trichlorophenol and its dioxin-contaminated herbicidal derivatives 2,4,5-T and 2,4,5-TP (silvex). In urban dwellers these residues probably result from foods stored in PCP-treated containers or sprayed with herbicides during growth: in one sampling, PCP residues were found in powdered milk, soft drinks, city water, bread, candy, cereal, noodles, rice, sugar and wheat, and herbicide residues in beef fat, bread, rice, and city water.[2] Rural people may be exposed directly, through agricultural and forest spraying and handling of treated wood products.



A mangrove forest in Vietnam five years after spraying with Agent Orange (2,4-D and 2,4,5-T). Dark areas are surviving trees. (From Ecoscience.*)*

Herbicides – or as industry euphemistically calls them, "plant growth regulators" – are chemical compounds designed to kill plants, different formulations being more effective than others on particular "target species." They are used almost everywhere: to clear roadsides, power line and railroad rights-of-way; to kill noxious or illegal plants such as poison oak, thistle, marijuana and opium poppies; to clear waterways of aquatic weeds; to sterilize land in preparation for planting; to weed grapes, corn and other crops; to weed out "unprofitable" hardwoods from conifer forests, to control the ripening of fruit and nut crops and improve their color in storage. With such varied applications over so vast an area of the country, they have become a silent menace to a whole population and present their worst dangers to future generations.

The most commonly used class of these chemicals are the phenoxy herbicides, 2,4-D, 2,4,5-T and 2,4,5-TP or silvex. These are synthetic analogues of natural plant hormones which regulate cell growth, thereby causing the plant's growth mechanisms to go haywire. In ways which nobody fully understands yet, the plant literally grows itself to death, producing twisted, grotesque cancerous shapes of stem, leaf and fruit in the process. Affecting the plants as they do, by disrupt-

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–SB

ing the action of DNA,[3] the herbicides also cause profound changes in the genetic structure, bequeathing mutations and inheritable defects on surviving plants.[4] Most disturbing, however, is that these synthetic plant hormones can have devastating effects on animal cells, particularly the germ cells.[5] While it requires a much greater dose of herbicide to kill a human or cow than a thistle, so that relatively few people or other animals are killed outright by them, low levels of contamination quietly and insidiously do their work, causing in the long run cancer,[6,7] birth defects[8] and mutations[9,10] as well as chronic illness: numbness of limbs, unnatural bleeding, headaches, paralysis, nausea, sterility, spontaneous abortion, skin, kidney, liver[11,12,13,14] and behavioral disorders[15,16,17] and inhibition of the immunological function of the thymus gland.[18,19] Research indicates that below certain concentrations, low levels of some poisons may escape the body's detoxification mechanisms and thereby exert more toxic effects than massive doses. Some herbicides, such as atrazine, are metabolized by the plants themselves into mutagenic substances. A food crop such as corn, which is weeded with atrazine, therefore manufactures its own mutagens for the consumer, be it pig or human.[20]

In addition to their own toxicity, all of the phenoxy herbicides contain contaminants – unavoidable by-products created in the manufacturing process – of a class of substance known as dioxins. One which has been studied extensively and has received much attention in recent years is 2,3,7,8-tetrachlorodibenzo-p-dioxin, or TCDD, popularly known as simply dioxin. TCDD is recognized to be the most toxic molecule ever manufactured by man, capable of causing cancer in rats at doses as low as 5 parts per trillion and fatal illness and abortion in monkeys at doses not much higher.[21] Its greatest threat lies in the fact that it does not break down readily but accumulates in the body, increasing with each exposure.[22] It binds to fat particles, building up in fat tissue stored against need, to be metabolized and do its damage when the organism calls on its reserves in time of illness or hunger. All formulations of 2,4,5-T and 2,4,5-TP contain it. There has been no level found of TCDD low enough not to cause some toxic effect, and there is no known antidote for it.[23] It has been found in the milk of nursing mothers in Texas and Oregon[24] and in the fat of market beef from cattle grazed on sprayed rangeland[25]; the highest concentrations found have been in animals from sprayed roadsides,[26] a fact which should give road-kill gourmets pause (see road kills article, *CQ* Spring '78).

Radiation, starvation, nuclear war, etc., are obvious and ever-present dangers to all life; toxic chemicals in air, water, food, soil, clothing, etc., are neither visible nor in most cases even acknowledged, but ignorance will not render them harmless. And as usual, knowledge of the dangers is suppressed by those who profit by producing them. The carcinogenicity and teratogenicity of the phenoxy herbicides was known before and during the Vietnam war,[27] yet over 5 million acres of that country were defoliated with Agent Orange (a mixture of 2,4-D and 2,4,5-T), exposing the men, women and children of the countryside as well as U.S. servicemen to a deadly compound whose most appalling effects could be delayed for years. It was easy to dismiss reports of cancer, birth defects, and chronic illness from Vietnam as propaganda. Now it's coming home: veterans who came back unheralded after the war are now suffering the same symptoms reported by the Vietnamese – as well as by farm and forest workers in Oregon, citizens of Arizona, Missouri, Minnesota, Wisconsin, British Columbia, New Zealand, Sweden, wherever herbicides are used. In Niagara Falls, N.Y., a whole neighborhood has recently been evacuated and families relocated after the discovery that their homes had been built on an abandoned chemical dump contaminated with a potpourri of toxic compounds, including TCDD, legacy of a company that once supplied Gibaudan (of Seveso fame) with trichlorophenol.[28]

Since herbicidal warfare was halted in 1970 in Vietnam, the manufacturers of these chemicals have convinced the timber industry, including the U.S. Forest Service, that their products are indispensable in forestry, where they now are used over millions of acres in the U.S. and Canada to convert healthy, mixed-growth forests to monocultures of fir and pine. They are also used on the U.S. rice crop, on the rangeland grazed by the nation's beef cattle, on Hawaiian sugar, and on vegetable, fruit, grain and grape crops. TCDD, their lethal contaminant, is found as well in cosmetics, cattle feed, insect repellants and other unlikely products, all derivatives of trichlorophenol. Like DDT, the TCDD in such products accumulates in organisms and bioconcentrates in the food chain, ultimately coming to rest in the carnivores and predators: human and shrew, hawk and salmon all bear the curse intended for a weed.

With all its smug assumptions of superior intelligence, the human species is tampering with evolutionary processes which are yet no more than an unsolved riddle. In this sense the twenty years a chemically-induced cancer takes to emerge are insignificant, for the effects of mutagenic substances on the gene pools of all life forms may not become apparent for many generations. Like the Vietnamese, like the veterans, we are all potential victims, even more so our children. The wholesale destruction of our forests and the poisoning of the forest environment have profound effects that extend beyond forest boundaries to ocean fisheries, wildlife, soil quality, water, climate, and the fragile balance of the biosphere.

[more →]

Chromosome Anomaly Rates

	Persons	Cells checked	Rate of chromosome anomalies
Control group of Vietnamese	15	1,500	1.14%
Vietnamese sprayed with herbicides	6	1,600	5.88%
Malformed infants born from mothers sprayed with herbicides	3	900	13.55%

From Funazaki[13]

IT IS NOT IMPOSSIBLE to reverse the increasing dependence of the food and fibre industries on toxic chemicals. Alternative methods of cultivation existed before herbicides and continue to be explored and refined. Forestry provides a good example.

The reasons these chemicals have become so indispensible in timber management are many, foremost among them being the deplorable state of northwestern forests as a result of many years of overcutting, vast clear cutting, sloppy or non-existent replanting, and the universal preoccupation with profit to the exclusion of other concerns. Herbicides are used to destroy the brushfields that flourish on clear-cuts neglected for years before replanting is attempted. They are also used to "weed out" commercially unprofitable but ecologically essential species of hardwoods which in a natural forest succession provide nutrients, shade, and wind and erosion protection for the conifers. The vast clear-cuts in the Northwest, some of them sprayed several times, are wastelands of landslides and debris, dominated by the proliferation of tansy ragwort, a poisonous weed resistant to herbicides and spreading rapidly over whole states as it colonizes the newly bared land.

The damage the herbicides inflict on the conifers is considerable,[29] a fact carefully obscured by herbicide proponents, as are the increased susceptibility of sprayed plants to insect pathogens[30] and the vulnerability of any monoculture to the varied hazards of disease and natural disaster. As no marketable survivors of herbicide treatments will be old enough to harvest for many years, the efficacy of "vegetation management with herbicides" is open to question. Herbicide use amounts to little more than an open-ended experiment, in which not only human health and survival are at stake, but the health, productivity, diversity and ecological balance of one of the last great renewable resources on this continent, the forests of the Pacific Northwest. As an Army Corps of Engineers critique put it, these forests have over millions of years evolved the most efficient possible use of their native soil, climate and terrain, and it is nothing short of arrogance to suppose we can improve upon it.[31]

To cease the use of herbicides on the forest would not, as the chemical and timber industries protest so vehemently, mean an immediate and devastating drop in timber production. Herbicides *are* quick, easy and relatively cheap, if one omits the hidden costs of illness and death in wildlife, livestock, humans, food crops, and the long-term decline of the forest itself. The primrose path is always quick, easy and cheap. And inevitably and too late, disastrous. The management of our forests must be changed, soon and drastically. The solutions are available, and they entail much more than simply stopping herbicide use; our forests must be tended in ways which obviate the necessity for herbicides at all:

1. Repair the brushfields caused by mismanagement with the use of human labor instead of herbicides and fire. There is a large and growing experienced workforce available now to accomplish this and replant these areas.

2. Eliminate clear-cutting. Again, it is the cheap, easy, fast way to cut trees, but it is not only extraordinarily wasteful, as a glance at any clear-cut will demonstrate, it is also disastrous to the forest soil and stimulates growth of the fast-growing brushfields and tansy plantations which proliferate in cleared expanses. It is also responsible for the degradation and silting of our rivers, destroying the spawning grounds of the Pacific salmon. Shelter belt cutting and selective logging are well-established methods of harvesting today's trees without sacrificing tomorrow's.

3. Replant cut areas immediately.

4. Reassess the economic value of diverse species. Currently the only species being replanted extensively is Douglas fir, because it grows fast and is the only remaining valuable saw-timber available in the northwest. Other native conifers such as hemlock and cedar may be slower growing, but their qualities may be of more value to future generations, and they are better adapted to thrive in many areas. A healthy forest would include all of them, as well as the hardwoods – maple, alder, oak, etc. – which mine the soil for essential nutrients, fix nitrogen, provide shade and shelter, disease and erosion protection, and supply food and habitat for a great diversity of wildlife as well as useful timber. It is these hardwoods which are the target of most herbicide applications, in the dubious belief that they "compete" with firs. This is a fallacy derived from row-crop agriculture, overlooking the fact that unlike wheat or soybeans our timber trees are native species adapted best to growing in a diverse ecological community in which each species plays an essential role: they do not compete, but complement each other.[32]

5. Make more efficient use of our harvest. Right now the bulk of what is cut – the branches, snags, defective or damaged logs, etc. – is discarded and burned. It should be put to use powering generators, producing heat, charcoal and gas, and its residue returned to the forest as fertilizer. The technology is available now to do so, and several functioning models exist.[33]

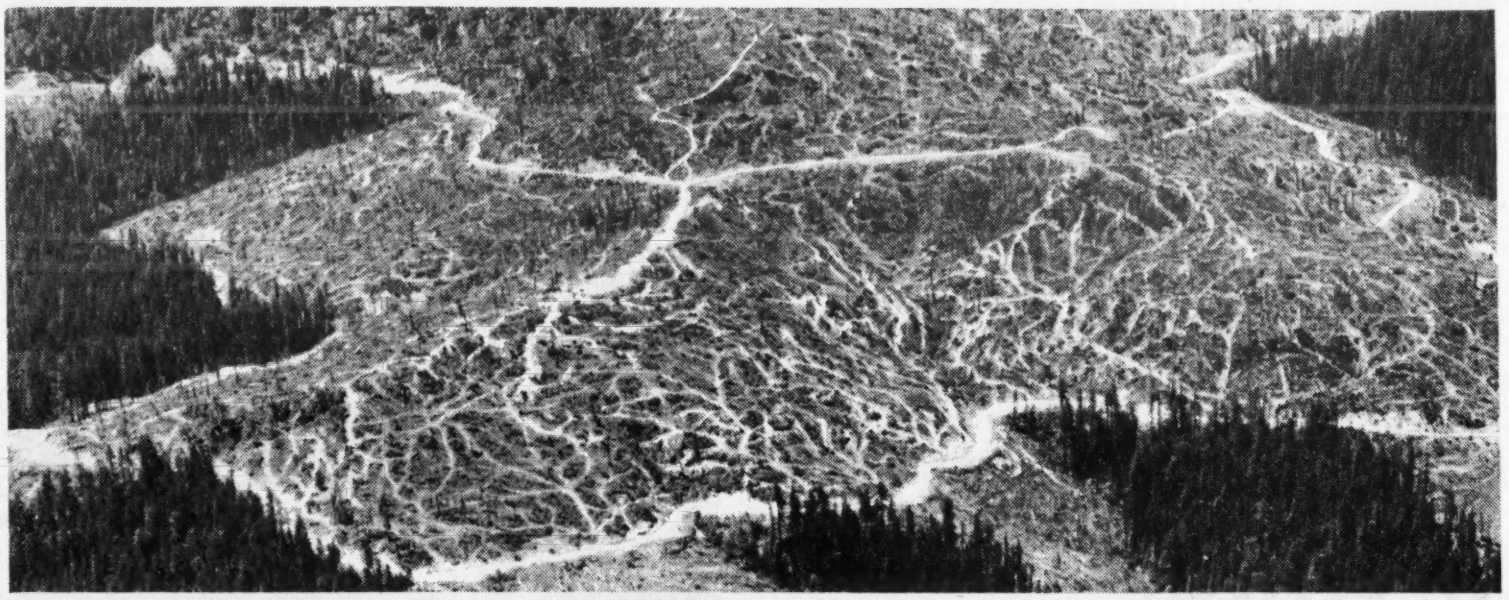
6. Cease to view the forest as a profitable element to be strip-mined, and begin – before it is too late – to tend and respect it as a potentially endless renewable source not only of timber but of water, energy, food, soil, oxygen, wildlife and beauty to bequeath to our children. ■

Common Polyhalogen Ions in National Cancer Institute mass spectra of urine extracts (male collegiate athletic teams and dormitory residents)

Frequency of occurrence

	Swimming team (11)	Football team (21)	Dorm residents (25)
2,4,5-TCP	7 (64%)	14 (67%)	13 (52%)
Pentachlorophenol	11 (100%)	21 (100%)	25 (100%)
2,4,5-T	1 (9%)	5 (24%)	9 (36%)
2,4,5-TP (silvex)	1 (9%)	6 (29%)	9 (36%)

After Dougherty & Piotrowska, 1976[2]



Clearcut redwoods in Northern California.

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Human labor instead of herbicides – tree planting Hoedads in Oregon.

A Guide to Worrying Intelligently About Having a Baby

From Lennart Nilsson, *A Child is Born.*

Normal human fetus at four months.

BY SUSAN STERN

"Environmental Factors"

AT THE INTERNATIONAL CONGRESS of Genetics conference last summer, Soviet geneticist Nikolai Dubinin announced that the percentage of children born with deformities has doubled world-wide in the past 25 years, largely due to more than 2,000 mutagenic substances in the environment.

Dubinin is the number one Soviet geneticist, and his colleagues in the United States respect his research for both scientific and political reasons, but many of them don't agree with him. No studies in this country document such an increase in birth defects, I was told by a spokesman for the National Institute of Environmental Health Sciences. It might be difficult to detect such an increase, however, since estimates of the current incidence of birth defects (including mental retardation) vary from 3 in 100 live births to 1 in 12, depending on who you talk to and what is counted as a "birth defect."[1]

The Environmental Mutagen Information Center (EMIC) reports that over 7,000 substances have been tested for mutagenicity. Radiation has been shown to break up chromosomes, and chemicals have rearranged the DNA in the genes of bacteria, fruit flies and lower mammals. Some suspected mutagens have killed the zygote (fertilized egg) in laboratory animals. But, as the American genetics establishment points out, mutagenicity in bacteria or even rats does not prove mutagenicity in humans.

Many obstetricians and gynecologists who do genetic counseling and prenatal diagnosis for people who think they have been dosed by everything from hair spray to LSD are conservative. The connection between a pregnant alcoholic and her mentally retarded son is easier to document than the relationship between the fingerless daughter of a Vietnam vet and her father's exposure to the herbicide Agent Orange (2,4,5-T) five years ago and a hemisphere away. When I asked one of the country's leading prenatal diagnosticians about environmental mutagens, he frowned at me. "That's just newspaper stuff," he said.

Genetic counselors tell many pregnant women that they don't know whether or not a suspected chemical is a teratogen (a substance which harms the development of the fetus). At present, the detection arm of human genetics research works like the police. In order to have a case they have to have a body. If you have already had a defective child, or have a family history of a genetic defect, the genetic counselors can help predict your chances of creating a further heir to misfortune. If you are a prospective mother over 35, they can screen your fetus for Down's syndrome, the most common birth defect, which strikes with increasing frequency as a woman ages.

The irony is that the so-called "genetic" birth defects cannot be separated from environmentally-caused defects. Since the environmental factors are not understood, most "genetic" disease cannot be predicted. "Environmental mutagens and teratogens" are the dark side of human genetics – the things that go bump in the night. But the scientific method by definition has no night vision. Consider the incident that occurred in a rural part of Oregon a few years ago.

In a six month period, in an area with about 100,000 inhabitants, about 10 spina bifida and anencephalic kids were born, born dead, with brains and/or spinal cords spilled open like jelly because something went

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–SB

wrong. The neural tube that encloses the central nervous system didn't close.[2] Given the national birth rate of 1,600 per 100,000 people and an incidence of spina bifida and anencephaly of .14 per 100 live births, 2.24 infants with these disorders might have been expected to appear.

"There must have been an environmental influence that went through there," said one University of California San Francisco prenatal diagnostician. "Our problem is, we don't understand the environmental influences." Some people have charged that the horror in Oregon might have been related to the spraying of various pesticides and/or herbicides in the area, but investigators report no conclusive correlation.

If you want to have a child, these uncertainties are far from academic. Yet nonspecific worry doesn't do anyone any good. The rest of this article is a guide to worrying intelligently about having a healthy baby. Undoubtedly, this guide will not be as comprehensive as your worry, but if you consider each of the following reasons to worry, you will be able to eliminate some concerns, calculate your odds on others, and protect yourself from the ever-multiplying dangers. Remember, however, that the root of teratogen comes from the ancient Greek *teratos* – monster. There is nothing new about birth defects. The next generation is always a risk.

Mendelian disorders: Problems you can see coming.

The 2,336 Mendelian disorders are passed down the generations through a single gene, according to Mendel's laws. Genes for some of these diseases (some types of dwarfism, blindness and deafness) will be dominant over the matching gene from the other parent. Other disorders (types of mental retardation, cystic fibrosis, phenylketonuria [PKU], Tay-Sachs disease and sickle-cell anemia) will be transmitted recessively, carried, possibly unobserved, for generations. Still a third category of diseases, the *X*-linked disorders (muscular dystrophy and hemophilia) will be carried recessively on the woman's *X*-chromosome and passed only to male children.

Take a look at your family tree. Consider your children, your brothers and sisters and their children, your parents, their siblings and their children, and finally, your grandparents and their brothers and sisters. If, as far as you know (don't worry if you can't remember the health of each relative) you can't find any incidence of genetic disease, multiple miscarriages or stillbirths, rest easy.

If a couple with such a normal record went to see a genetic counselor, they would be sent home. You can forget about worrying about dominant and *X*-linked diseases. Not that they could absolutely never occur (in genetics you "never say never"), but they would be too far-fetched for intelligent worry.

If you are the worrying sort, you might give a backwards glance to the recessive diseases. Every one of us carries genes for four to eight diseases[4] that will never be expressed unless we meet our genetic match. You need worry only if you will be mating with a relative or if one of the "bad" genes you carry is one common to a particular ethnic group which you are marrying within.

About 60,000 Black Americans have sickle cell anemia, a crippling and sometimes fatal blood disease. Another 2 million Blacks are carriers. In about 1 out of every 900 American Ashkenazi Jewish couples both partners are carriers of Tay-Sachs disease, a disorder that causes brain destruction, blindness and eventually death. About 1 in every 25 white Americans carries the gene for cystic fibrosis, a disease which kills slowly by clogging the breathing passages with thick mucus. There is no test for carriers of cystic fibrosis, but mass screenings (simple inexpensive blood tests) can determine carriers for sickle cell anemia and Tay-Sachs disease.[5] For the 954 other suspected recessive diseases there are usually no mass screenings, though carrier screenings are available for many recessive diseases if they appear in the family tree.

Go back to your family tree. If there is evidence of some disorder in your family, and it worries you, you can go to a genetic counselor. Most major medical centers have them. A local office of the March of Dimes (which may be more accessible) can direct you to the closest genetic counseling facility. The genetic counselor will try to determine if the familial defect is an inherited disorder, and if so, how it is inherited. With this information, you can calculate your risks.

Dominant Disorders

Oddly enough, some people with dominant genetic disorders do not show symptoms of having them. Some dominant disorders like Huntington's chorea, a degenerative nervous system disease, do not appear until the late twenties. Closer examination by the counselor may detect the disorder in question if it has indeed been passed on to the parent. If one parent is found to be a carrier, each and every child will have a 50% chance of inheriting the disease. With most prominent disorders all you can do is gamble – there is no prenatal diagnosis.

Recessive Disorders

If you are looking for a specific disorder, carrier screening is now available for an ever-increasing number of diseases. Prenatal diagnosis can detect whether or not the condition has been passed on to the fetus in more than 80 disorders. The method used for virtually all prenatal diagnosis is amniocentesis, the extraction and testing of amniotic fluid.[6] The risks of amniocentesis will be discussed later in the article, but if you are concerned about the recessive diseases, you should know that cystic fibrosis and phenylketonuria (PKU, which causes mental retardation) cannot be detected by amniocenteses, though sickle cell and Tay-Sachs disease can.

X-linked Disorders

Female carriers of *X*-linked disorders may not show it, but, again, a counselor can detect carriers. Screening tests for muscular dystrophy and hemophilia can show a probability, but not a certainty, that the parent is a

carrier. If the woman is a carrier, half her sons will inherit the disorder. Amniocentesis cannot reveal most of the *X*-linked disorders but it can tell the sex of the fetus, and a male can be aborted.

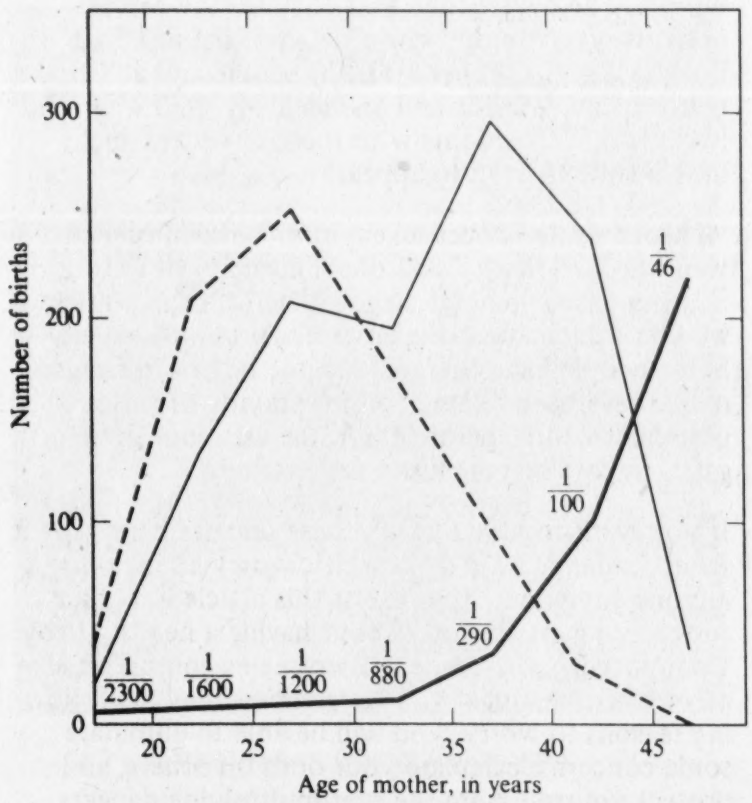
Age: A legitimate concern for both men and women

Most women I know, whether they think they want children or not, worry that their reproductive time will run out on them before (or just as) they make their decision. Men, on the other hand, seem to think they can spread their seed forever. Both opinions are the conventional wisdom, and neither is entirely true.

Maternal Age

Infant mortality rates are highest for women over 40 and under 19. Some doctors allege that there is a general increase in defective children born to older women, but this evidence is extremely controversial.[7]

The only firm correlation is between women's advancing age (see graph) and the incidence of Down's syndrome and other abnormalities associated with errors in chromosome number. Women destined to produce these children cannot be screened (except in a small fraction of cases where the defect is an inherited tendency), but amniocentesis can be performed before the 16th week of pregnancy and a defective fetus can be aborted. Amniocentesis will detect all errors of chromosome number and structure, though structural abnormalities (causing retardation and other defects) are not usually associated with advancing maternal age.



Incidence of Down's syndrome at birth as a function of mother's age. The dashed line plots all births, in thousands. The lighter solid line plots the number of babies born with Down's syndrome. The darker solid line shows the incidence of Down's syndrome relative to maternal age. (From Penrose and Smith, **Down's Syndrome**, *1966. Reprinted from Cavalli-Sforza and Bodmer,* **The Genetics of Human Populations**, *1971.)*

Paternal Age

Recent studies with new chromosome staining techniques have proven that the extra chromosome causing Down's syndrome comes from the father in one-third of cases.[8] Other studies show a correlation between fathers over 35 and the incidence of "new" mutations causing dominant genetic diseases.[9]

Achondroplasia (dwarfism) is a "new" mutation 80% of the time. L.S. Penrose, in a study of non-familial achondroplasia, found an increase in the disease when males married late in life, and a high incidence of dwarfism in the last children born in large families. A 1970 study of the disease confirmed that the average age for fathers in non-familial achondroplasia was 36 years old whereas fathers of normal children average 29 years.

Fathers of children with non-familial Marfan syndrome (height, vision and heart abnormalities), averaged over 36 years. Apert's syndrome (facial and limb deformities), has been shown to be five times more frequent when the father's age was 37 than when it was 27. A mean paternal age of nearly 38 years was found in a study of Fibrodysplasia Progressiva, a condition in which extra bone develops in muscles and connective tissues freezing the baby into a fixed position.[10]

Older maternal age was not found to be a factor in any of these conditions studied. But before men over 35 decide to stop having children, it should be emphasized that the "new" mutations turn up in less than 1% of births – even in children born to very old fathers. The new mutations cannot, however, be detected by amniocentesis.

Though it is clear that a substantial number of abnormalities are associated with increasing maternal and paternal age, age per se has not yet been established as the cause of the disorders. Given the increasing suspicion cast on such factors as radiation and man-made chemicals, it would be interesting to see studies of the incidence of such deformities as Down's syndrome in populations isolated from industrial society.

Amniocentesis: Is the diagnosis more dangerous than the risk of disability?

You will be offered amniocentesis if you are a mother over 35, or if you have had a previous child with a chromosomal disorder or a Mendelian disorder which can be diagnosed, or if Mendelian diseases run in your family. You may also want the prenatal diagnosis to determine the sex of your child if you are at risk for an *X*-linked disease. Though it is uncomon, you may request and sometimes receive amniocentesis if you have been exposed to a well-documented teratogen. Since 1961 amniocentesis has also been used to diagnose Rh incompatability between mother and fetus.

The process is this. The woman's abdomen is anesthetized, and a four-inch-long hollow needle is passed through the uterus into the amniotic sac, hopefully without nicking a blood vessel or penetrating the fetus or umbilical cord or stabbing the placenta. Some clinics use ultrasound to guide the needle away from these hazards, but others feel that the safety of ultrasound is not sufficiently documented to use it rou-

AMNIOCENTESIS

Amniocentesis can detect chromosome abnormalities such as the tripling of chromosome No. 21 which causes Down's syndrome. (From Lawrence Karp, **Genetic Engineering**, *1976.)*

tinely. Ten to twenty milliliters of amniotic fluid is removed. Depending on the condition being investigated, the fluid may be tested immediately or fetal cells in the fluid may be cultured for two to three weeks before the results are received.

The prevailing medical opinion is that the risks of amniocentesis are zero for the mother and less than 1% to the life of the fetus. You should know, however, that a few recent studies have calculated the fetal loss at 3%.

According to the National Registry for Amniocentesis Study Group which in 1975 conducted a collaborative study of about 1,000 amniocenteses in Canada and 1,000 in the United States, the procedure causes no maternal complications and no increase in fetal loss, prematurity, congenital malformations or infant mortality compared with controls. A very recent study conducted by the University of California, San Francisco, and reported in the January *New England Journal of Medicine* concluded that the procedure is "safe, reliable and extremely accurate."

The most significant study which disagrees with the UCSF and Registry results was conducted by the MRC Working Party on Amniocentesis which compared the cases of 2,428 who had had amniocentesis with a set of "matched" controls. Their results, reported in the *British Journal of Obstetrics and Gynaecology* indicated a 2.6% fetal loss for the amniocentesis women, compared to a 1.1% loss for the controls. According to this study, the babies of the mothers in the first group also suffered more from certain respiratory difficulties at birth and major orthopaedic postural difficulties. Later complications, such as post-partum hemorrhage, may also be attributed directly to amniocenteses, the report concluded.

Though amniocentesis is the predominant form of prenatal diagnosis a few other methods are currently used. Ultrasound is sometimes employed to reveal structural abnormalities in the fetus such as dwarfism and microencephaly or to confirm a diagnosis of neural tube defect.

A fetoscope is used in some major research centers experimentally to look at the fetus or obtain blood from the placenta. But sticking this small fiberoptic scope through the abdominal wall into the uterus is more dangerous than the amniocentesis needle. The risk of fetal loss with the fetoscope is currently estimated at 5%.

Worrying about Rh factor: One injection eliminates the problem

You should know your Rh blood group (positive or negative) before having a child. Most people are Rh positive, and if two Rh positive or two Rh negative people mate, there is no problem. But if an Rh negative woman becomes pregnant by an Rh positive man, the fetus may turn out Rh positive, in which case the blood types of the fetus and the mother will "fight" each other.

The mother's system will produce an Rh antigen which is passed to the fetus, whose system identifies it as a foreign protein and counters by manufacturing a protein antibody. This newly made antibody recrosses into the mother's blood and remains there permanently.

There is usually no problem with the birth of the first child, but after the mother has been sensitized by the fetal antibody, the antibody crosses the placenta in subsequent pregnancies and begins to destroy the red blood cells and tissues of every Rh positive fetus. Fetal death, still birth, or severely ill newborns with anemia and jaundice may result.

The risk of these outcomes can be eliminated easily by giving the Rh negative mother an injection of the protein immunoglobulin at the birth of her first baby. It is very important to know both partners' blood groups before this time, however, because a woman who fully believes she is pregnant for the first time may have already been sensitized by a previous unrecognized miscarriage, an aborted pregnancy, or even an erroneous blood transfusion given her years earlier.

Metabolic disorders: Sick mother, sick baby

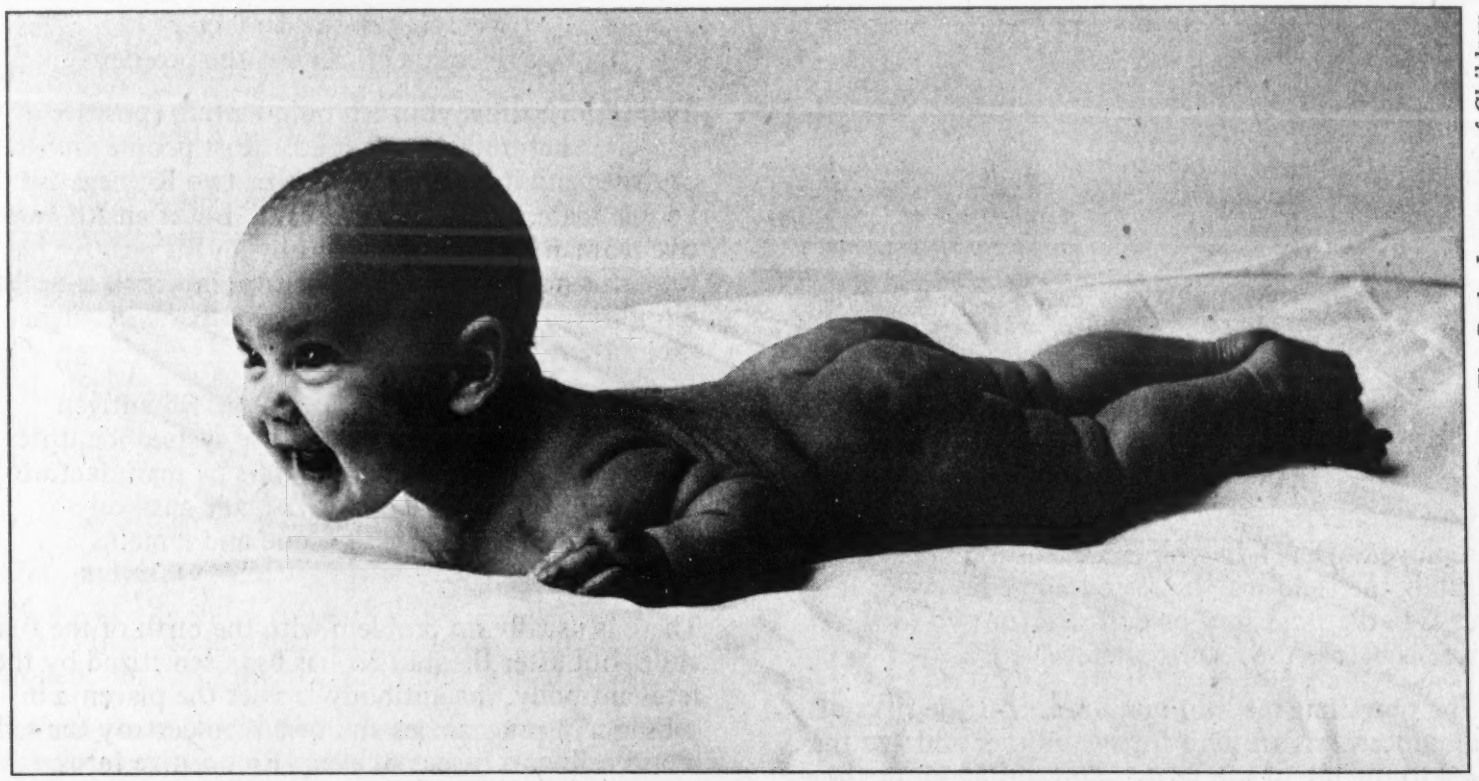
If a pregnant woman has various metabolic disorders, including cystic fibrosis, sickle cell anemia, PKU, diabetes, or an over or underactive thyroid, her baby may be affected.

PKU babies may suffer from severe mental retardation. A routine blood test at birth, however, can detect that this recessive disorder has been passed on. The infant can then be treated with a special diet. Sickle cell and cystic fibrosis mothers both have an increased risk of dying in childbirth. Sickle cell mothers, like diabetes mothers, have an increased risk of losing babies at birth, and surviving babies of diabetic mothers are frequently defective, with congenital heart defects, lowered intelligence, or caudal dysplasia (a severe deformity of the lower spine).

Mothers with thyroid abnormalities have an increased risk of bearing children with chromosomal disorders. Reports from a recent large study conducted by the Yale University School of Medicine suggest an eightfold increase in chromosomal abnormalities (such as Down's syndrome) in the children of hyperthyroidic mothers.

All of these are a good argument for early and reliable prenatal care.

[more →]



Suzanne Szasz, *The Body Language of Children.*

Another good kid – most are.

Malnutrition

Whether caused by poverty, macrobiotics, fad diets, anorexia nervosa or junk food, malnutrition can be harmful to the unborn. Intrauterine growth retardation has been related to severe malnutrition. Iodide deficit has been proven to affect neonatal goiter and "cretinism," a condition causing arrested physical and mental development. Again, prenatal checkups can monitor a mother's health.

Teratogens: Avoid what you can, don't fret about the rest

Last year the state of New York paid to evacuate 236 families from the town of Niagara Falls because their homes bordered an area contaminated by toxic wastes where the Hooker Chemical and Plastics land fill once was. Just months ago a state official revisited the neighborhood with the news that the contaminated zone was bigger than they had originally thought. "I would recommend that pregnant women and children under two years of age consider re-locating," he said to a crowded neighborhood meeting.

Radiation, some industrial chemicals, viruses, and some recreational and prescription drugs are either proven or suspected teratogens. A teratogen acts primarily on the growing fetus, not necessarily on the genetic pattern in the germ cells. It inhibits the normal biochemical and/or morphological development of the new life. Its effect is determined not only by its chemical makeup, but also by its dosage and the exact time at which it interacts with the fetus.

In the first two weeks after the egg is fertilized, the seedling is so sensitive that any environmental influence strong enough to harm it will destroy it. From day 15 to day 60, the embryonic period, the new life is most sensitive to teratogens. After day 60, the fetus is somewhat more resilient, but some teratogens can still cause major damage.

Your first worry concerning teratogens might be whether or not they will affect your child before you know you are pregnant. If you have become pregnant accidentally, your child may be 8 to 12 weeks developed before you know it's there. In that case, you may have already dosed your baby with substances you wanted to avoid.

That's just one of the problems with teratogens. Even in the most well-planned pregnancy, you can't always be sure what to avoid. Some substances you won't know are under suspicion, others you won't be able to get away from, either because they happen to be drugs you must take for your health, or because they come along with your job, or are viruses so imperceptible that you won't know you had one until it shows up in your child.

What can you do about environmental teratogens? Stay away from all you can. If you think you have gotten a dose of something, you might try to get some literature on the substance or rush off to a genetics counselor. The only problem is, no one may be able to tell you anything conclusive about the substance. Prenatal diagnosis may be attempted, but if and when they find something, such as broken chromosomes, they may not be sure if the breaks have caused damage to the child. So you can go ahead with the pregnancy and worry a lot or have an abortion and risk losing a healthy baby.

The teratogens that follow seem worthy of worry.

Heavy cigarette smoking (20+ a day) is correlated with intrauterine growth retardation and a decrease in uterine blood flow which may cut oxygen to the fetal brain and cause stunted intelligence. A recent study has shown that 44% of the children of *alcoholic mothers* are mentally retarded to some degree, and 32% of their children show microencephaly, defects of the limbs and heart, and abnormalities of the

head and face. This so-called "fetal alcohol syndrome" has worked its way up to number 23 on the roster of 25 disorders most frequently presented to genetic counselors.[11]

The children of *narcotics addicts* show withdrawal symptoms 50% to 90% of the time, with a 4 - 10% mortality rate. A few cases of limb malformations have been reported after the ingestion of *marijuana* during pregnancy, but these studies are *far* from conclusive, and most investigators have labeled normal doses of marijuana non-teratogenic.

A few studies have reported the birth of children with deformed and missing limbs or extremities to mothers who took LSD during pregnancy. However, most of these women were taking other drugs at the time. And none of them had taken pure LSD. All reviewers of the data on LSD teratogenicity remark that despite the considerable number of studies done, the most consistent result is inconsistency. LSD-injected rats have produced no deformed offspring. LSD-injected mice have in some studies yielded normal embryos and in other studies produced a 57% above normal incidence of neural tube defects. Hamsters injected with LSD likewise produced litters that were 10% defective – mostly neural tube defects. In both mice and hamsters the LSD was injected before the 8th day of pregnancy. In chickens, LSD again induced neural tube defects when given in early pregnancy. In rabbits, no gross malformations were detected after injection with LSD between days 4 and 12 of gestation.[12]

There have been reports of LSD-induced changes in DNA, and chromosome breaks, both in the user and the child of the user. However, as already stated, chromosome breaks in the fetus may not mean a deformed child. Most of the many investigators of the teratogenicity of LSD have either flatly concluded that it is *not* a teratogen or indicated that it doesn't seem teratogenic but should receive further study. It seems that the cautious approach would be to refrain from LSD during a planned or known pregnancy. However, if you discover you are pregnant, want the child and then remember you took LSD after fertilization, you might consult a genetic counselor.

Cancer drugs are considered powerful teratogens, an indication for prenatal diagnosis. *Anti-convulsant drugs* are strongly suspected of causing cardiac defects, cleft palate, and intrauterine growth retardation. The iodides found in *cough medicine* and *asthma medicine* can cause fetal goiter.[13]

Aspirin (taken in doses exceeding four - five tablets a day for more than four days during pregnancy is not recommended by some doctors. High doses of aspirin have caused birth defects in rats and mice, and even normal doses of aspirin have increased birth defects in rats when the test animals were simultaneously exposed to *benzoic acid*, a common food preservative.[14]

The minor tranquilizers, *Valium* and *Librium*, and the anti-psychotic tranquilizer *Haldol* have been indicated in studies as causing cleft palate and limb malformations.[15] Too much *vitamin A* taken in the first three months of pregnancy has been reported to cause a deformation in the urinary tract of an unborn child.[16]

Some doctors recommend that their clients take no drugs whatsoever during pregnancy, but it appears that more doctors adopt a casual attitude. According to one recent study, 80% of American women take drugs while pregnant.[17] Another study documented that these women take an average of 6.4 prescription drugs and 3.2 self-prescribed medications.[18]

Add these drugs to more diffuse environmental teratogens which are extremely hard to monitor and the situation becomes more complicated, and as the aspirin-taking rats know, more lethal.

Radiation is definitely teratogenic. Exposure of the fetus to x-rays can cause microcephaly (small heads), with the associated mental retardation, plus bone defects in the skull, eye defects, cleft palate and severe limb deformities. The deformed and retarded children of the Japanese women of Hiroshima who were pregnant when the bomb exploded have provided conclusive evidence of radiation's teratogenicity.[19]

Geneticist Aubrey Milunsky, in his book **Know Your Genes**, suggests that less than 5 rads of x-ray exposure to the fetus is nothing to worry about. But if in the course of x-rays to her back, bowels, or kidneys the pregnant mother exposes the less than four-month-old fetus to more than 10 rads, the danger to the newborn is "very high." Most genetics clinics will do prenatal diagnosis for irradiated mothers, but once again, even if abnormal results are found, the fetus may be unaffected.

Pregnant women should be particularly aware of what substances they are exposed to on the job. Recent studies have shown that the "operating room environment," possibly the stress but probably the anesthesia, causes an increase in birth defects in workers.

Pregnant women should also be wary of *lead* and *mercury*. There have been reports of defective children born to women who ate pork contaminated by a mercury-containing fungicide in the hog feed. The classic example of mercury poisoning, of course, is that of the children deformed by the mercury-laden fish their mothers ate from Japan's Minimata Bay. Lead poisoning has been documented since the 19th Century, but some women are still exposed to this teratogen on their jobs. Recent studies have also shown that newborns of mothers living next to freeways have elevated blood-lead levels. In mice, borderline increases in blood lead have indicated hyperactivity. In sheep, high lead levels have been correlated with slow learning.[20]

According to U.S. government statistics, 10% of our mentally retarded children were victims of *infections* contracted by their mothers during pregnancy. The most well-known virus is rubella (German measles). During the nation's last big rubella epidemic in 1964, 20,000 children were born with major birth defects. Women exposed to rubella in early pregnancy have had fetuses showing evidence of infection in 50% of the cases. About 8 to 10% of childbearing women are

still susceptible to the rubella virus. If this worries you, you can have yourself vaccinated against it, only don't get the vaccination while you are pregnant or as little as three months before trying to get pregnant. The innoculation virus is alive and could endanger the fetus.

Another virus that may well be teratogenic is Toxoplasma, the disease the ladies magazines have made famous. It is transmitted through cat feces. In New York Toxoplasma was estimated to affect 4 to 6 of every 1,000 pregnancies, causing birth defects in one out of a thousand births. There are hardly any symptoms and no innoculation. Dr. Milunsky recommends getting rid of your cat when you try to get pregnant, but you may not feel that she is a teratogen. Or this might be an example of recognizing a risk and choosing to live with it.

Mutagens: Have they got us surrounded?

When the existing evidence on mutagens is considered (see previous articles), worrying about them seems justified. But where do you begin? In the *Handbook of Teratology* there is a fine chapter on the subject by representatives from both the Environmental Mutagen Information Center and the National Institute of Environmental Health Sciences. According to this report, a number of chemicals have been shown to cause "dominant lethal" mutations in mammals. They cause the death of the heterozygous zygote, often soon after fertilization, probably as a result of chromosome abnormalities. Substances causing dominant lethal mutations include *Captan*, a fungicide; *Diethylsulfate,* an industrial chemical; *Metepa,* used to crease and flameproof textiles; *Mitomycin C,* an anti-tumor agent; *Actinomycin D*, an antibiotic; *LSD-25; Hydroxylamine,* an antioxidant in soap manufacturing and a reducing agent in the photography, tanning and textile industries; and *HEMPA*, an agricultural chemical.

All of these cause chromosomal abnormalities in one or more test systems, from bacteria to mammals.

Chromosome aberrations are also caused by: the herbicide *2,4,5-T (Agent Orange), vinyl chloride, nitrous acid* (formed from the food preservative sodium nitrite), *caffeine, hydrogen peroxide, formaldehyde, mercury chloride, lead acetate,* and other preservatives, industrial chemicals, agricultural chemicals, pollutants, and radiation.

I don't know if it's possible to avoid all the suspected mutagens anywhere in the United States today. At best you can be vigilant. *Science* magazine is a good source of information on suspected mutagens and the ongoing controversy on mutagen testing systems. If there is a chance you might be exposed to a mutagen at work, don't wait for your employer to let you know. Over 2 million asbestos workers are currently dying of asbestos-related disease because they were not informed 20 years ago that asbestos is a potent carcinogen. The following agencies can give you more information on suspected mutagens.

The Environmental Mutagen Information Center (EMIC)
The Environmental Teratogen Information Center (ETIC)
Information Center Complex/Information Division
Oak Ridge National Laboratory
P.O. Box Y Building 9224
Oak Ridge, TN 37830

Computerized data-banks, organized expressly to keep up with the growing literature in both fields and disseminate that information to the public.

Biochemical Genetics Section, Environmental Mutagenesis Branch, National Insitute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park,
North Carolina 27709

Less geared to the public than Oak Ridge, but more geared to knowing what's going on in mutagenesis research at any given moment.

Environmental Mutagen Society
4720 Montgomery Lane
Bethesda, MD 20014

The parent organization of EMIC, a ten-year-old association of investigators in the mutagenesis field.

Atlanta Center for Disease Control
1600 Clifton Road N.E.
Atlanta, GA 30333

Primarily a center for investigating infectious diseases – but they have been known to keep track of "outbreaks" of genetic diseases such as anencephalitic births.

Environmental Protection Agency (EPA)
Washington, D.C. 20460

They are currently working on evaluating the mutagenicity tests to make recommendations (late this year, early 1980?) on preferable tests.

Food and Drug Administration (FDA)
Washington, D.C. 20204

They have been doing mutagenicity tests on mammals.

The following groups have/want information on exposure to Agent Orange.

Citizen Soldier
175 5th Avenue, Room 1010
New York, NY 10010

Sherrie Farrell, *Gabriel's Very First Brithday.*

Healthy mother, healthy baby, no anesthetics.

Vets for Self Reliance
P.O. Box 153
Brewster, MA 02631

Agent Orange Information Resource Service
P.O. Box 6558
Washington, D.C. 20009

One last word. About intelligent worry and perspective. After working on this article for weeks I went into a coffee shop. Ate the preservatives and drank the coffee anyway. Feeling burdened, I read the newspaper, felt more burdened. A young woman came in with a small blond child she set on the floor. The child tottered precariously, looking at me with amusement. When her mother came back, she recognized the man next to me and introduced her child:

"This is the latest addition," she said proudly, "Ten months old." Then she left again to put cream in her coffee. Her daughter kept giggling at us.

"Maybe she knows some joke we don't know," I said to the man.

"She has life," he said. He noticed I had my table draped with a newspaper and pointed down to his own, "I keep reading this thing and I go down, down, down . . ."

I couldn't agree more. ■

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3. Victor A. McKusick, *Mendelian Inheritance in Man* (Baltimore: Johns Hopkins, 1975).
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5. Mass genetic screening usually costs around $15 - $25.
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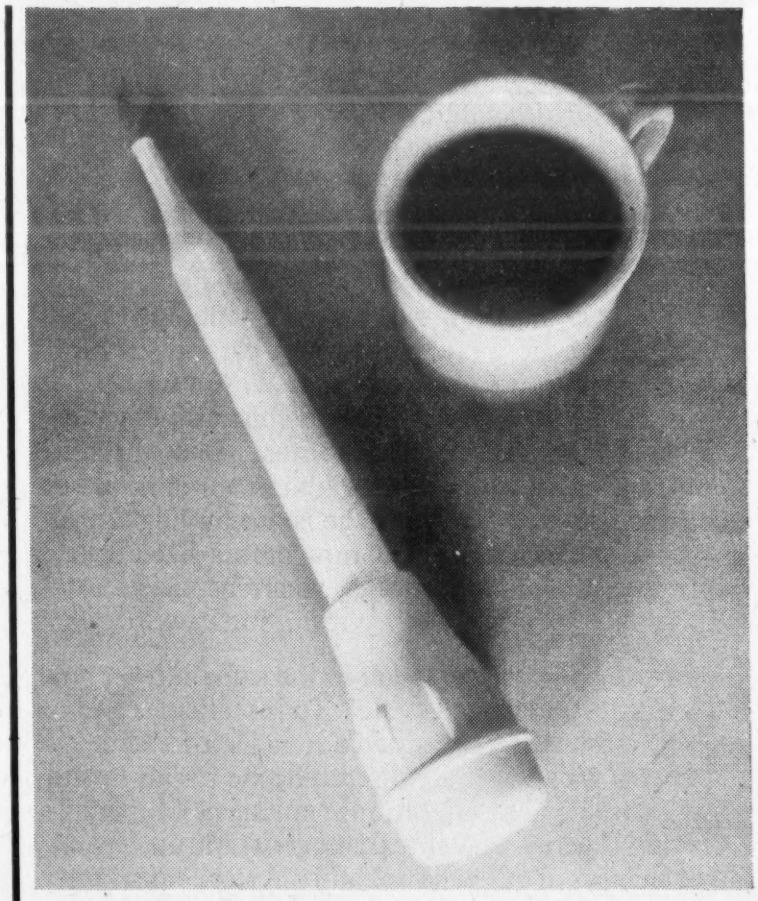


Oven baster babies

Hearing of three completely unrelated similar events in a week suggests there is a trend going on.

A gay woman in the San Francisco Bay Area wanted a baby but not a man around the place, so she arranged for a female friend to find a man who would anonymously contribute seed. The man masturbated into a warm cup, the intermediary delivered the cup, the woman took an oven baster and squirted the donation up her vagina, and nine months later mother and baster had a baby boy, now two and much loved.

Two gay men in San Francisco, responding to an identical request from a different gay woman, mutually contributed their sperm, which was duly deposited by oven baster, and the lady is now seven months pregnant. Unlike the first story, this bunch knows each other. All are interested to see who resembles whom.

The third story concerns a woman who got her virgin girlfriend pregnant via oven baster, yielding a genuine virgin birth.

It's always interested me that you have to get all kinds of permission to kill somebody, but anyone can start a person that wants to. I think that's great.

*I see here in the newspaper (***Toronto Star***, 7 January 1979) that a scientist named Armand Karow told a Houston meeting of The American Association for the Advancement of Science that artificial insemination: 1) significantly reduces miscarriage, 2) dramatically reduces birth defects, and 3) raises the likelihood of having a boy to 60%. He added that sperm frozen up to 15 years have successfully been used.*

Any year now, I figure, we'll have a black market in frozen sperm from (or allegedly from) famous donors.

—SB

BIOHAZARD ORGANIZATIONS AND BOOKS

by Ruthanne Cecil and Peter Warshall

In the late 1950s, in the film *The Incredible Shrinking Man*, Scott Carey, a regular guy, is accidentally sprayed with insecticide used by road crews to help beautify his town's trees. A few weeks later, while out vacationing on a boat, a radioactive mist passes over him as he stares into the deep blue sea. Within weeks, he begins to shrink. Doctors diagnose his problem as a "molecular change." Within months, he has shrunk so much that his wife cares for him in a doll house on the living room floor. While she is out buying groceries, the house cat attacks the now mouse-sized Scott Carey who escapes to the cellar where he wins a battle with a spider by using a straight pin for a sword.

Twenty years later, we are all in the same movie, now retitled, "Desperate as Usual." To insecticides and radiation, humans have added a long list of chemicals and energy waves that are directly toxic to our health, cause heritable gene alterations (mutagens), birth defects (teratogens), cancer (carcinogens) and many sublethal changes in our behavior and physical equanimity.

These substances and energy waves greet us in our everyday life: food additives, medical drugs, industrial and household chemicals, hair dyes and other cosmetics, cigarette tobacco smoke, asbestos fibers, X-rays, micro-waves and, of course, all sorts of pesticides. Collectively called BIOHAZARDS, these chemicals and energy waves are fabricated by humans and introduced into the environment in quantities harmful to human health at the cellular and subcellular level. Biohazards should be distinguished from human-made hazards that do not specifically change metabolism (like the pre-1977 Ford Pinto gas tank), and from natural hazards like polio virus, dysentery amoebas, and cholera.

The word – biohazards – has arisen for political purposes. Before Rachel Carson, bureaucracies concerned with working conditions, health, food purity and safety had ignorance as an excuse. Since then, they have often been irresponsible and timid in doing their job of ensuring excellence in public health. Thalidomide and cyclamates have come and gone, but only after huge delays and actual birth defects were highly publicized. Now microwave workers have contracted glaucoma. Stomach cancer is widespread in New Orleans from chlorinating drinking water polluted with petroleum products. Road salt in New England has so polluted wells that children drinking the water have abnormally high blood pressure. "Tumor registries" have only recently become standard practice in a few states. In Maryland, it took a huge lawsuit to bring about the tumor registry as a minimal public health method of tracing the size of various cancer epidemics. So the word "biohazards" has risen to make the FDA, the USDA and all sanitarians pro-people health radicals: to change the AMA into a responsible pro-health lobby to get workers, "environmentalists," and farmers to understand their common interests.

The task is complex and difficult. To get a feel for the post-Rachel Carson era, try to visualize the over 250 million pounds of pesticides (some 11,000 pesticide products containing mixes of some 1200 active ingredients) used just in California in 1976 – the lion's share to California's super-rich agribusiness. Most of this was used to increase crop yields and preserve crops for delayed marketing and processing, but an unknown quantity was simply used to make vegetables and fruits look pretty. (Data is hard to come by, but it is estimated that tomatoes grown for canning could be grown with half the amount of pesticide the crop presently receives.) Reduction of pesticide use for blemish and color control would save the grower and consumer money, improve working conditions for pickers and packers, as well as reduce biohazard exposure. But the mass buyers like A & P and Safeway insist on cosmetic standards which encourage pesticide overuse. The consumer, unaware of the relation between good looks and pesticides, indirectly encourages biohazard use. The health departments bemoan the massive changes required in consumer and mass buyer attitudes, agribiz farming practices, and petrochemical company lobbying, and often hide their heads in frivolous paperwork. Where to begin?

Some pesticide uses in 1976 California seem to have no alternatives. For instance, 35 - 40 million pounds went to killing household termites and other extermination programs. But other uses could substitute human labor for the Agent Orange mentality. (Agent Orange is a herbicide used in Vietnam to clear forests. It is now in use in Northern California to kill hardwoods that supposedly reduce the rates of growth of more "valuable" species like Douglas Fir.) Instead of herbicides, human labor can thin forests and remove scrub and hardwood; clear rights-of-way for roads, railroads and utilities; manage parks, golf courses and other recreational areas; control vegetation on watershed lands and clear clogged waterways.

We are quickly learning that the internal equilibrium of the human body relies on the external balance of nature. Just as a pollutant is a substance that is recycled in a way that harms the Water and Nutrient cycles of Earth, a biohazard is a substance that is recycled by the human body in a way that disrupts our metabolic balance. The health of the "external" ecosystem and the health of the "internal" body chemistry are intricately and thoroughly linked.

Below are a list of the national organizations and grassroots organizations that we know are presently involved in curtailing biohazard use and searching for viable substitutes or action. If you know of others, please write.

Ruthanne Cecil and Steve Lerner aided me enormously on the biblio and organization lists. Ruthanne helped force the California legislature to look at biohazards and is now helping grassroots groups grow strong in their battle to stop herbicide spraying in northern California forests. Steve is the Director of Research of Commonweal as well as Editor of Common Knowledge (see above). For me, they are gentle warriors who help me remain resilient in spirit as we all try to move Monster Goverment toward a more humane politics.

–Peter Warshall

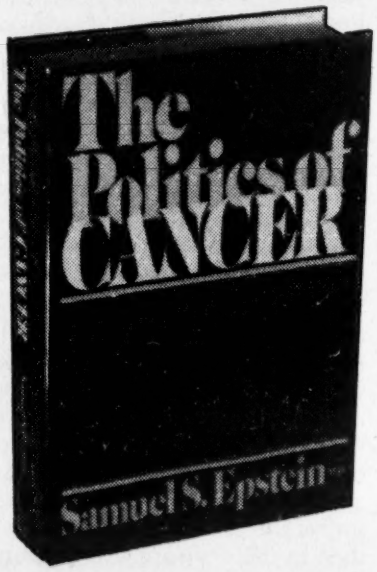
The Politics of Cancer

This is a comprehensive treatment of chemical environmental carcinogens, focusing on their regulation and non-regulation by government and industry. Epstein attacks various current myths concerning the prevalence of cancer in American society and closely examines the scientific norms which govern inferences from animal and human experimental studies. Thirteen case studies of environmental carcinogens are presented, illustrative of three separate areas of concern: 1) The Workplace with studies on asbestos, vinyl chloride, bischloromethyl-ether, and benzene; 2) Consumer Products, including tobacco, red dyes No. 2 and No. 40, saccharin, acrylonitrile, and female sex hormones; and 3) The General Environment — pesticides, aldrin/dieldrin, chlordane/heptachlor, and nitrosamines. A final section discusses governmental policies and the agencies established to regulate particular aspects of the cancer problem, describes non-governmental policies (what industry does), and concludes with a long section of what steps individuals can take to prevent cancer. The book also contains a lengthy set of useful appendices identifying carcinogenic substances, governmental reports and regulations, and groups (governmental, private and consumer oriented) involved in the cancer question.

—Deane Neubauer

Not included in this issue of CQ *but thoroughly researched in Epstein's book are lists of Labor Publications on Occupational Health. If you want specific information on a specific biohazard in your home or workplace, don't forget the nearest medical library.*

—Peter Warshall



The Politics of Cancer
Samuel S. Epstein, M.D.
1978; 583 pp.
$12.50 postpaid
from:
Sierra Club Books
Box 7959
San Francisco, CA 94120

or Whole Earth

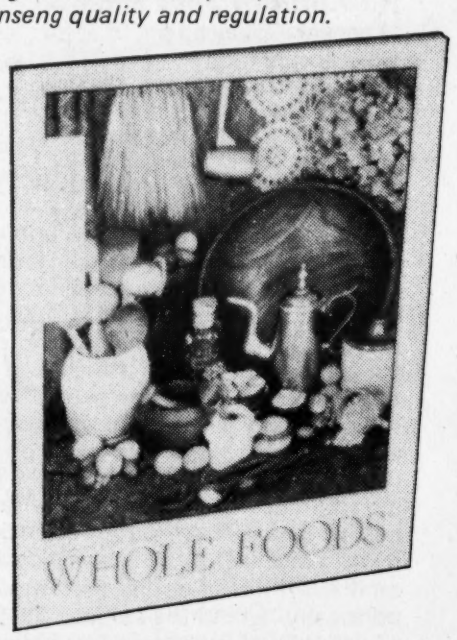
The Seven Warning Signs of Cancer

1. Change in bowel or bladder habits.
2. A sore that does not heal.
3. Unusual bleeding or discharge.
4. Thickening or lump, especially in the breast.
5. Indigestion or difficulty in swallowing.
6. Obvious change in a wart or mole.
7. Nagging cough or hoarseness.

Whole Foods

Each dinner I look at my plate and say: Where does this food come from? What soils? Water? Nutrients? I have yearned for someone to be able to tell me what happened to this food from seed to shop to stomach. Whole Foods *does it. A buyer's guide and detective work on all kinds of food — from olive oils to cereals. Its attitude is like the* Wall Street Journal. *If people know what's good, they'll buy it and, if they buy only good food, then the natural foods industry will prosper. Fine summaries of contemporary USDA, FDA and other food-related politics. Brief summary of crop and marketing conditions throughout the country. Special articles like problems of ginseng quality and regulation.*

—Peter Warshall
[Suggested by Gay Leslie]



Whole Foods
(The Natural Foods Business Journal)
$24 /yr., monthly
from:
Whole Foods
2219 Marin Ave.
Berkeley, CA 94707

Xylitol is a natural sweetener derived from Finnish birch trees. Finnish dental researchers maintain that, unlike sugar, xylitol does not provide nutrients for the bacteria in the mouth which cause tooth decay and may actually help to repair teeth just beginning to decay. Xylitol occurs in such common foods as strawberries, carrots, bananas, lettuce and plums. The human body produces about half an ounce of xylitol each day as part of its protective metabolic processes. A recent British study linked xylitol to cancer. Doubt has been cast on these findings by American studies as well as by international studies conducted during the past 10 years. The World Health Organization considers xylitol safe, and is planning to test the effects of xylitol on people in French Polynesia, an area where dental caries are a severe problem.

Saccharin has been replaced by xylitol in Squibb Corp.'s Care Free Sugarless gum and Warner-Lambert's Trident gum sold in Canada. The Wm. Wrigley Jr. Co. introduced xylitol last year in Orbit gum.

Hellas, the xylitol gum originally tested in Finland, is now available through an American distributor, FinnFoods, Inc., 135 Country Rd., Cresskill, NJ 07626.

GROUPS CONCERNED ABOUT BIOHAZARDS

Environmental Action
Suite 371
1346 Connecticut Ave. N.W.
Washington, D.C. 20036

There are 430,000 generators of hazardous wastes in the U.S. Ninety percent of the waste discharged does not meet EPA standards. EA has an inventory of these polluters. Write them and ask for your state list. EA also publishes a biweekly of political up-dates, especially in their major field of interest, conservation political lobbying.

Federation of Homemakers, Inc.
P.O. Box 5571
Arlington, VA 22205

Lobbies against biohazardous food additives. Newsletter.

Environmental Defense Fund
1525 - 18th St. N.W.
Washington, D.C. 20036

Leading group in bringing lawsuits to stop use of biohazardous pesticides and other consumer products. Major work on water supplies contaminated with substances harmful to human health. In short, litigation, research, and newsletter.

Society for Occupational and Environmental Health
1341 G. St. N.W., Suite 308
Washington, D.C. 20005

Professional society of doctors and scientists that holds conferences and supplies information.

Western Institute for Environmental/
Occupational Sciences, Inc.
2001 Dwight Way
Berkeley, CA 94704

An activist group of concerned medical people. Screened thousands for asbestos-related health problems using mobile medical units. Now working on the effects of microwaves on workers.

Center for Study of Responsive Law
1156 - 19th St. N.W.
Washington, D.C. 20006

Nader's group that put together The Chemical Feast *reviewed below.*

Public Citizen Health Research
2000 P. St. N.W.
Washington, D.C. 20036

Also a Nader group.

[more →]

No World Without End

This is one of the great, state-of-the-Earth messages. The authors are scholarly prophets, warning like Isaiah that our very bodies are as endangered as the planet. Chapters survey the condition of humankind in the workplace, the inner-city, industrial agriculture, and the American diet. They turn our Age of Metals (especially lead, mercury and cadmium) into a mirror so we can see who we are and what we are doing. A startrek into the micro-chemical era of environmental (our) health.

—Peter Warshall
[Suggested by Steve Lerner]

No World Without End
(The New Threats to Our Biosphere)
Katherine and Peter Montague
1976; 319 pp.
$10 postpaid

from:
G.P. Putnam's Sons
200 Madison Ave.
New York, NY 10016
or Whole Earth

Our current problems come upon us rapidly and unexpectedly because of the work of "indentured savants," to use the elegant euphemism coined by Dr. James Sullivan. By this, we mean professional people who are paid to lie, to mislead the public, to help corporations evade responsibility for their actions. This is the hired phalanx of shabby scientists, slick publicists, and venal lawyers who spend their lives delaying the removal of toxic materials from the environment and misinforming the public about the nature of the environmental crisis. They suppress data, they generate spurious data, they create false data, and they do their best to ignore important information that contradicts their own. They are visible in every public forum on environmental matters but of course their most important work goes on politically behind the scenes. They are the intellectual whores of industry, and they bear personal responsibility for much of the worst pollution and resource-waste that has been allowed to occur.

Report on Environmental Assessment of Pesticide Regulatory Programs

A government publication, so you can be sure that anything offensive to the producers of pesticides has been watered down. But given its origins, this is an excellent beginning for changing existing regulations. Let's hope it's not shelved for ten years. Includes: Pesticide Use Patterns in California; Environmental and Health Impacts; Economic Factors; Alternative Technologies and Proposed Regulations.

—Peter Warshall

Report on Environmental Assessment of Pesticide Regulatory Programs
Jake Mackenzie, Asst. Director
Dept. of Food and Agriculture

Inquire for prices; there are many different parts to this report.
from:
Dept. of Food and Agriculture
1220 N. Street, Rm. A-149
Sacramento, CA 95814

The Pesticide Conspiracy

You plant a crop, you know it must be bug-free or it will ultimately be rejected by the food processor. This is not because the bugs are dangerous, but rather because federal cosmetic laws on produce require ridiculously low bug counts and because consumers have been taught to be squeamish about the little multi-legged creatures. The answer is to spray and over-spray for insurance.

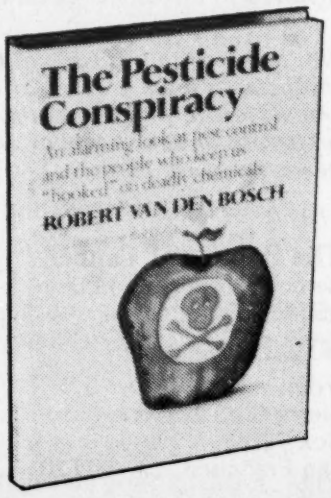
The result is that you kill off the good bugs that eat the bad bugs; then the fittest bad bugs survive the spray and become pesticide-resistant. The bug problem gets worse, spray dosage increases, becomes economically unfeasible, and a new improved product is introduced to repeat the cycle.

Who wins? The companies that make and sell pesticides. Who loses? The farmer who spends more per acre, the farm and factory worker who suffer from pesticide poisoning (sterility, nerve disorders, cancer), and the consumers who buy contaminated food and thus jeopardize their health.

A walk through the field of biological control in agriculture, guided by an insect-loving University of California professor, whose experiences with the pesticide mafia have metamorphosed him into an eco-radical.

—Ruthanne Cecil

The Pesticide Conspiracy
(An alarming look at pest control and the people who keep us "hooked" on deadly chemicals)
Robert van den Bosch
1978; 226 pp.
$8.95 postpaid
from:
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY 11530
or Whole Earth



Perhaps the greatest absurdity in contemporary pest control is the dominant role of the pesticide salesman, who simultaneously acts as diagnositician, therapist, nostrum prescriber, and pill peddler. It is difficult to imagine a situation in which society entrusts so great a responsibility to such poorly qualified persons. Pesticides rank with the most dangerous and ecologically disruptive materials known to science, yet under the prevailing system these biocides are scattered like dust in the environment by persons often utterly unqualified to prescribe and supervise their use.

Pest-control advisement should be a high-grade technology conducted by thoroughly qualified technicians. Instead it is overwhelmingly in the hands of skilled merchandise hucksters employed by the agri-chemical industry. Little wonder that contemporary pest control is characterized by economic, ecological, and social chaos.

Friends of the Earth
124 Spear Street
San Francisco, CA 94105

David Brower's group that has remained only major national environmental group with interest in biohazards. Mostly, they testify and litigate. Newsletter contains some biohazard info.

Commonweal
Box 316
Bolinas, CA 94924

A non-profit group concerned with all kinds of human stress. Hopes to have clinic for chronic diseases and seeks methods of treating them. Produces excellent quarterly newspaper Common Knowledge *(see review).*

National Resources Defense Council
15 West 44th St.
New York, NY 10036

A public-interest law firm with a good track record in halting use of carcinogenic food contaminants and air/water pollutants.

Groups in the Pacific Drainage

Citizens Against Toxic Sprays, Inc. (CATS)
1385 Bailey Ave.
Eugene, OR 97402

The best effective grassroots group against chemical spraying of forests and people. Newsletter.

Northwest Coalition for Alternatives to Pesticides
Box 375
Eugene, OR 97440

A Pacific Northwest group to fight the use of Agent Orange. Expanding its interest to other biohazards. Grassroots networking so everyone knows what everyone else is doing. Newsletter and meetings.

Coalition on Environmental and Occupational Health Hazards
2530 Capitol Ave.
Sacramento, CA 95816

Fledgling group to influence the California legislature on policy issues relating to biohazards.

Suffer the Children

Thalidomide: 1. Scientists inside drug companies knew before it happened that the fetus could be hurt by drugs that didn't hurt the mother, but they did nothing to test for that effect. 2. In Britain, Japan and West Germany, thalidomide was available long after its crippling effects were well known. 3. Drug companies paid compensation only after long, expensive, vicious litigation with parents who had plenty of problems already. 4. The disaster wasn't worse because of sheer luck and could've been prevented through mild intelligence. 5. There have not been enough reforms either in drug companies or in government agencies to prevent thalidomide or worse from happening again.

It's not over. The kids with no arms are 20 now and nobody is acting like they've learned anything. This book emphasizes Britain, but covers various styles of criminal negligence all over the world.

—Anne Herbert

Suffer the Children: The Story of Thalidomide
The Insight Team of The Sunday Times of London
1979; 308 pp.
$12.95 postpaid

from:
The Viking Press
299 Murray Hill Parkway
E. Rutherford, NJ 07073
or Whole Earth

Grünenthal and its lawyers adopted some very questionable tactics. The defence lawyers repeatedly asked medical experts appearing for the prosecution: "If thalidomide causes malformed births, then how do you explain the remarkable increase in 'thalidomide-type' malformations in Czechoslovakia, Hungary, and Poland, where thalidomide has never been on sale?" Grünenthal's lawyers never produced any figures to support this claim of increased malformations, and it turned out to be false. Next, Grünenthal mounted a public relations campaign outside the court to push its view that thalidomide had not been proved to cause malformations, and to suggest other possible causes. Eminent physicists, pharmacologists, and medical embryologists were said to have expressed doubts about thalidomide's blame. Professor Lenz noticed that many of the articles quoted had been written by someone called "Alfred Pullman," and he tried to find him and interview him. When he failed to find anyone with this name, Lenz wrote to the scientists who had been quoted in Pullman's articles and asked them for verification of their published statements. All of them denied categorically that they had ever made such statements. When Karl Schulte-Hillen, the young Hamburg lawyer who had a thalidomide child, accused Grünenthal of manipulating the press, a Grünenthal lawyer replied, " 'Manipulation'? We would call it 'influencing.' Certainly we try to influence the press through our handouts. In our opinion not only is this not dishonourable, it is our duty." How far this "influencing" went was revealed on May 26, 1970, when the prosecution told the court that at least five journalists had contacted the prosecutor's office during the trial to complain that they had been threatened with "reprisals" by representatives of Grünenthal because the company had not liked what they had written.

Common Knowledge

The purpose of this 50-page newspaper-size quarterly is to provide detailed descriptions of environmental threats to personal and public health. As such, it is the only publication dealing completely with biohazards and you. The editor, Steve Lerner, summarizes and explains problems of human health, biological ambiguities and social change in clear, simple prose. Recent articles include the future of medicine, electromagnetic smog (bathing the family in microwaves), dangers of defoliants, TV as a sugar-pusher, and more abstract commentaries such as, "Is Environmental Stress Causing Bio-Social Decline Among Young People?" The up-and-coming paper forum for biohazard concern.

—Peter Warshall

Common Knowledge
$10/yr.

from:
Commonweal
P.O. Box 316
Bolinas, CA 94924

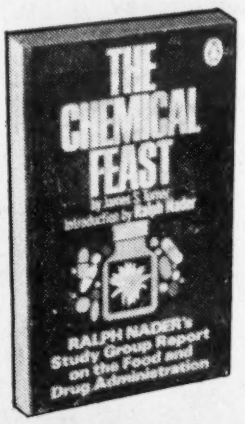
The Chemical Feast

Chock-full of little Watergates — coverups, doctored memos, shelved research, book burning, wire-tapping, raids on small vitamin companies, food-drug-agribusiness lobbies — Ralph Nader's Center for Study of Responsive Law has served up a full course analysis of what the Food and Drug Administration is doing, and what needs to be done.

—Ruthanne Cecil

The Chemical Feast
(The Ralph Nader Study Group Report on Food Protection and the Food and Drug Administration)
James S. Turner
1970, 1976; 273 pp.
$6.95 postpaid

from:
The Viking Press
299 Murray Hill Parkway
E. Rutherford, NJ 07073
or Whole Earth



There is no consistency in the food standards. Some items must be labeled in some foods but not in others. Emulsifying agents, for example, must be labeled in pasteurized process cheese food, but the same agents need not be labeled in a different product called pasteurized process cheese. There are dozens of examples of this kind of confusion. . . .

The failure to label caffeine on cola drinks and Dr. Pepper does not necessarily present a health hazard. It does demonstrate an insensitivity toward honesty and fair dealing with consumers. Some consumers wish to avoid consuming caffeine for various reasons. Mormons reject caffeine on religious grounds. Others consider it a health risk.

•

So little serious and original scientific activity is undertaken by the FDA that it is virtually dependent on the research work of industry, which, apart from its obvious bias, is meager and ineffective. Seventy per cent of all food standards are initially proposed by the food industry. Nearly all research on food additive safety is conducted by industry, not the FDA. The abysmally low amount of money that the food industry applies to basic research makes this FDA reliance particularly offensive. In 1968 Representative Craig Hosmer asked why the FDA relied on research data other than its own and pointed out, "The food industry is notorious in its unwillingness to put money up for research and development. It is the lowest industry on the ladder in R & D expenditures."

The Health Effects of Environmental Pollutants

Written for the practicing clinician, this volume is filled with useful data that can help doctors do the difficult detective work involved in tracking down the often delayed and disguised health effects of environmental pollutants, particularly airborne pollutants, in the population at large.

Waldbott covers a wide spectrum of pollutants — pulmonary irritants (ozone and chlorine), fibrosis producing agents (silica, iron, cobalt, barium), asphyxiating pollutants (carbon monoxide and hydrogen sulphide), systemic poisons (lead, mercury, fluoride, and cadmium), allergic agents, radioactive contaminants, carcinogens, and mutagens, as well as smoke.

The Health Effects of Environmental Pollutants *is vastly informative. It stands out as eminently readable in a field known for its jargon-ridden and impenetrable prose.*

—Steve Lerner

The Health Effects of Environmental Pollutants
George L. Waldbott
1973, 1978
$13.50 postpaid

from:
The C.V. Mosby Co.
Times Mirror Co.
11830 Westline Industrial Drive
St. Louis, MO 63141

MAYBE WE'LL END LIKE THIS...

BY R. CRUMB ©1979

OKAY, WHAT'S THE STORY ON THESE CRITTURS??

PITIFUL LOOKING BUNCH, AREN'T THEY?

YAWP HAWP

WHA- ME WORRY

ORP

WE PICKED THEM UP ON A GUTTED PLANET ABOUT 200 LIGHT YEARS FROM HERE... THE PLACE HAD SEEN BETTER DAYS!

AH HM! THEY DEFINITELY LOOK LIKE DEGENERATE SPECIMENS TO ME!

IT WAS REALLY WRECKED!

THEIR PLANET WAS CLUTTERED WITH ANCIENT RUINED CITIES AND ROADWAYS AND RUSTING MACHINERY... THESE FOLKS COULDN'T TELL US ANYTHING ABOUT ANY OF IT... THEY SEEM TO HAVE NO KNOWLEDGE OF THEIR OWN HISTORY...

BUT IT WAS SIMPLE ENOUGH TO DEDUCE WHAT HAD HAPPENED THERE...

WUGG

THEIR ANCESTORS WERE HIGHLY INTELLIGENT BUT VERY AGGRESSIVE AND PREDATORY...

AT ONE TIME PROBABLY ABOUT A THOUSAND YEARS AGO THEY OVERRAN THEIR ENTIRE PLANET... THEY MIGHT HAVE NUMBERED IN THE BILLIONS AT THAT TIME...

ONE... TWO... THREE...

THEIR INTELLIGENCE AND KNOWLEDGE HAD REACHED A CRISIS... THEY WERE ABLE TO DRASTICALLY MANIPULATE THEIR ENVIRONMENT BUT WERE UNMINDFUL OF THE CONSEQUENCES... EVEN THE THREAT TO THEIR OWN GENE POOL SEEMED NOT TO CONCERN THEM VERY MUCH...

UH HUH... I KNOW OF SEVERAL OTHER PLANETS WITH SIMILAR HISTORIES... THIS IS ALL TOO FAMILIAR...

LOOK HOW THEIR EYES KEEP OOZING CONSTANTLY!

IT SOMETIMES HAPPENS THAT WHEN A CERTAIN LEVEL OF INTELLIGENCE IS REACHED, THEY UNWITTINGLY DESTROY THE HARMONIOUS BALANCES OF NATURE...

YES, THAT SEEMS TO BE EXACTLY WHAT WENT WRONG WITH THEM...

THE EVIDENCE INDICATES THAT A MAJOR FACTOR IN THE DECLINE OF ORGANIC LIFE ON THAT PLANET WAS THE RELEASE INTO THE ECO-SYSTEM OF POWERFUL DEADLY SUBSTANCES MANUFACTURED BY THE INTELLIGENT SPECIES...

THESE SUBSTANCES EVENTUALLY CONTAMINATED ALL LIVING THINGS... IN FACT, THE PLANET IS STILL HIGHLY CONTAMINATED AND UNFIT FOR HABITATION...

I WAS.....

THEY ACHEAVED MASTERY OVER THE REALM OF MATTER BUT THEIR SPIRITUAL AND SOCIAL WISDOM NEVER DEVELOPED TO ADEQUATELY CHECK THEIR TECHNICAL AGGRESSION....

IN. IT'S PRESENT CONDITION THEIR PLANET HAS LITTLE TO OFFER IN THE WAY OF FOOD, AND THE CLIMATE IS BRUTALLY HARSH.

IN OTHER WORDS, THEY "SHIT IN THEIR OWN MESS KIT"...

SNRK

AAEEE

ALTHOUGH IT'S OBVIOUS FROM THE ANCIENT ARTIFACTS AND RECORDS THAT THE WEATHER WAS ONCE MILD AND MANY PLACES WERE FORMERLY LUSH WITH GROWING THINGS...

ONCE THE DECLINE SET IN THEY DIED OUT RAPIDLY.. IN ONLY A THOUSAND YEARS THEY WERE REDUCED TO THESE FEW PATHETIC SPECIMENS...

HEY!

PERSONALLY, I DON'T THINK THEY CAN MAKE IT INTO ANOTHER GENERATION... THEIR SURVIVAL ABILITY SEEMS TO HAVE REACHED ABSOLUTE ZERO....

TOOBAD THEY NEVER MADE IT INTO THE INTER-GALACTIC BROTHERHOOD, BUT IT'S NOT AN ISOLATED CASE... SOME OF THESE INTELLIGENT SPECIES AREN'T SUCCESSFUL... MAY AS WELL DO AWAY WITH 'EM, I THINK...

WELL, WE CAN'T SAVE 'EM ANYWAY, SINCE THEY'RE CONTAMINATED WITH DEADLY TOXINS...

GIVE 'EM THE ATOMIZER...

TZZT!

IT'S DONE... THEY'RE GONE...

LET'S GO GET SOME LUNCH, WHADDAYA SAY, FELLOWS?

END

Politics

The Overdeveloped Nations

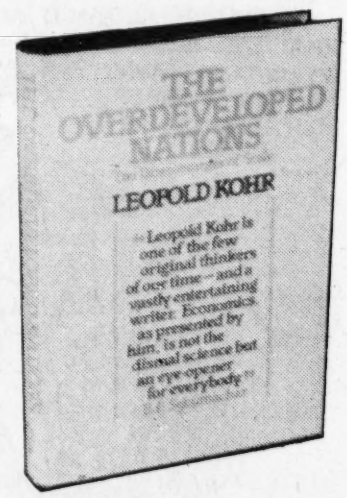
This is an extremely sensible book; it is even delightful. Another way of saying that is that it articulates a lot of things that we've intuited for years. Although it doesn't seem to have impinged on many World Leaders, I suspect a great many people will find Kohr's thinking congenial. His thesis is that when societies outgrow a certain critical size (15 million members), the problems they insurmount become inherent and insoluble consequences of that overgrowth.

Kohr deals with nations as having personality, and makes an excellent critique of Development in those terms. He argues frequently by analogy, and his theory stands up nicely throughout; it has the virtue of being the simplest possible explanation of the inability of mega-states to provide for the summum bonum *of their members. It also explains the inexorable collectivization of even capitalist/individualist societies.*

First published in 1957 (I guess. *Schocken, the U.S. publisher mentions the original publication nowhere. Nor, seemingly, does it bother with proofreading. Pity. The book deserves better.),* **The Overdeveloped Nations** *is still timely. Kohr's ideas are as neat and elegant as Schumacher's, and his acerbic humor gives this book a worldliness absent from* **Small Is Beautiful.**

If, like me, you hope that nothing succeeds like secession, read **The Overdeveloped Nations.** *Then send a copy to your Congressman.*

—Stephanie Mills



The Overdeveloped Nations
(The Diseconomies of Scale)
Leopold Kohr
1977; 185 pp.
$9.95 postpaid
from:
Schocken Books
200 Madison Avenue
New York, NY 10016
or Whole Earth

The most successful organizers in history have always been not the unifiers but the dividers. The device keeping the empire of the Persians intact was the division of their conquests into manageable small *satrapies*. The Roman empire was based not on the power of its legions but on the weakness of its dismembered national groups, the *provinces*. Great Britain divided her unruly, unequally large and ever-feuding English, Scottish, Welsh, and Irish nations, uniting instead a host of nondescript counties. And even the organizational success of the United States is due to the fact that she is actually a Disunited States. The flourishing enterprise of 50 pliable small states would obviously be impossible to handle if it included in United Nations fashion 4 or 5 veto-yielding great powers.

•

A change in the velocity of money has the same effect as if the quantity of money had changed. As an inflation may thus be caused quantitatively, by an increase in the supply of money, it may also be caused qualitatively, by an increase in the money's velocity.

•

The richest German regions are to this day those which until not so long ago were the small sovereign states of Hamburg, Bremen, Frankfort, Hesse, Wurtemberg, Bavaria, Saxony rather than the large power of Prussia. Historically smallness, even in the absence of natural resources, can thus hardly be considered an obstacle preventing countries from getting rich. On the contrary.

•

Whatever the new nations are gaining in development, they seem to be losing in identity.

The Power Broker

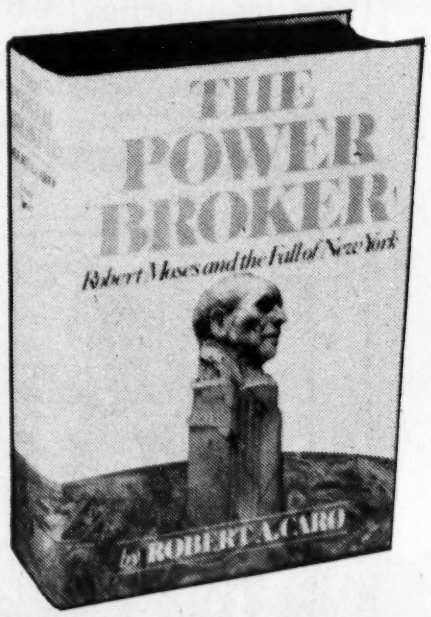
Robert Caro's biography of Robert Moses is the best book I've read in years. It came highly recommended in response to a request for one book that would tell me how cities worked and be a good read into the bargain. Once I picked it up, not only did it become impossible to put down, it also became difficult not to talk about to anyone who would listen.

The subject of the book is a man of almost superhuman energy, power, and arrogance. Virtually singlehanded, Robert Moses remade New York — physically and fiscally. He created parks, parkways, expressways, bridges, power authorities, playgrounds and pools. He was beyond the reach of governors, mayors, and the public, until Rockefeller brought him down.

The story of his life is the story of his works, which literally dwarf the seven wonders. He was a political genius and a master manipulator of the media. So it took genius to tell his tale. Caro's mastery of investigative reporting is stunning. It took him seven years to produce the **Power Broker** *from a mountain of material — hundreds of interviews, the state papers of New York from Al Smith's governorship onwards, city documents, and newspaper coverage — and the result is spellbinding and immensely informative. It got him a Pulitzer in 1975, and unanimously awed reviews.*

Trying to write about it makes me realize how shopworn the superlatives have become, applied to paler stuff. The book is excellent, about excellence gone awry. If the metro-polis is your meat, then you have a treat in store.

—Stephanie Mills



The Power Broker
(Robert Moses and the Fall of New York)
Robert A. Caro
1974; 1246 pp.
$17.95 postpaid
from:
Alfred A. Knopf, Inc.
455 Hahn Rd.
Westminster, MD 21157
or Whole Earth

The Strip Mine Handbook

In 1977, after a ten year battle, the federal Surface Mining Control and Reclamation Act became law. As a result, the notorious abuses involved with strip mining coal are now controlled by the new Office of Surface Mining (OSM), a branch of the Interior Department.

This **Handbook** *is done so well it could serve as a model of its kind. It takes a technical subject, and an even more complex set of federal regulations, and makes them comprehensible to the average concerned citizen. How to spot, document, and report violations, and the entire grievance procedure, from an OSM inspection to a federal court suit, are superbly summarized. Since all the tough language in the world means nothing if there is no enforcement, citizen participation is going to be crucial to the success of the new law.*

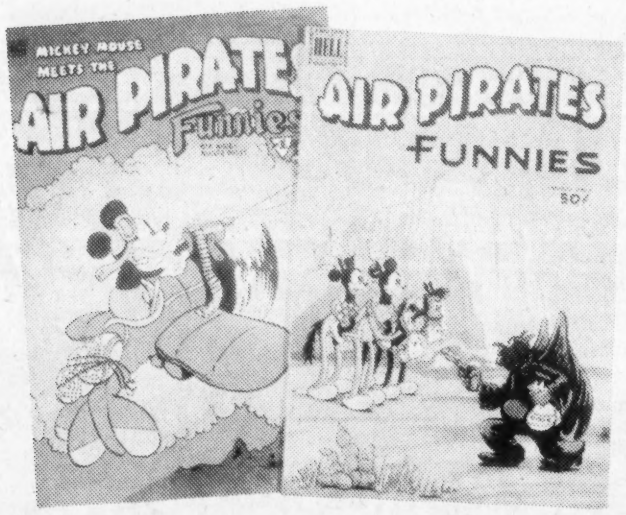
—Richard Nilsen

The Strip Mine Handbook
(A Citizen's Guide to the New Federal Surface Mining Law. How to Use It to Protect Your Community and Yourself)
Center for Law and Social Policy and Environmental Policy Insitute
1978; 107 pp.

$1.75 postpaid
from:
Environmental Policy Institute
317 Pennsylvania Ave., S.E.
Washington, D.C. 20003

Dan O'Neill Defies U.S. Supreme Court

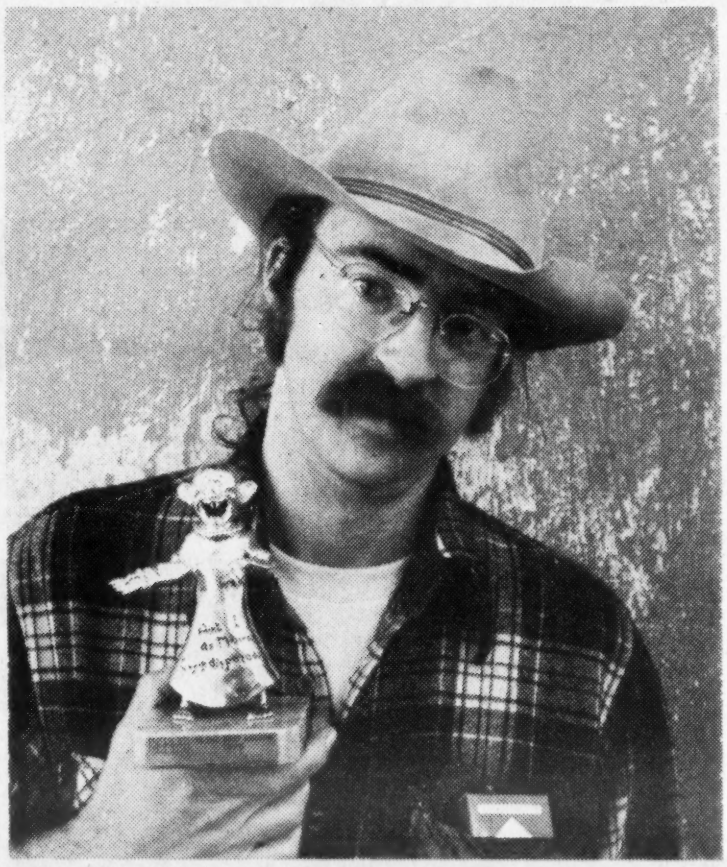
A Really Truly Silly Moment in American Law



In July and August, 1971 two wonderful comics hit the underground market — "Air Pirates Funnies No. 1" and "Air Pirates Funnies No. 2." Each selling 15 - 20,000 copies at 50 cents, they were the exuberant youthful work of Dan O'Neill, Bobby London, Ted Richards, and Gary Hallgren.

Two hallowed traditions were upheld — 1) twitting one's elders, 2) using comix to parody comics (as Al Capp used to honor "Dick Tracy" with his "Fearless Fosdick.") The elder in this case was Walt Disney — the General Motors of the cartoon world, immense, inescapable, admirable, despicable. And so "Air Pirates Funnies" took such Disney characters as Mickey and Minnie Mouse, Bucky Bug, Goofy, etc. and translated them into countercultural activities and language with the savage good humor reserved for speaking about one's gods.

(Am I making up this reverence? I tell you, Dan O'Neill has damn near every "Uncle Scrooge" comic the genius Carl Barks drew for Disney. Dan also has a bleak perception of what the death of Bambi's mother in the Disney movie "Bambi" did to a generation of kids whose fathers were away at war.)



Dan O'Neill in 1976 with "The Yellow Kid," cartooning's highest international award, given by the 11th International Congress of Cartoonists and Animators at Lucca, Italy.

Prodigious success and its responsibilities and failures draws parody. That's how a culture defends itself. Especially from institutions so large that they lose track of where they stop and the world begins so that they try to exercise their internal model of control on outside activities.

And so in October, 1971 Walt Disney Productions took unamused notice of the Air Pirates (in my mind I see a thousand-foot Mouse automaton turning slowly) and got a Temporary Restraining Order slapped on the comics. The U.S. District Court of Northern California granted an injunction by Disney in July, 1972, and found against the Air Pirates in August, 1975. Judge Albert C. Wollenberg opined that "Air Pirates Funnies" constituted copyright infringement, trademark infringement, unfair competition and trade disparagement.

The matter was appealed to the Ninth Circuit Court of Appeals, which in September, 1978, reversed the lower court findings on trademark, competition, and trade disparagement, but upheld the ruling that "Air Pirates Funnies" infringed Disney's copyright. The view was that the "parodists could have expressed their theme without copying the copyrighted cartoon characters almost verbatim . . ." (Look it up: 581 F. 2d 751 [1978].)

Attorneys Michael Kennedy and A. Kirk McKenzie appealed to the U.S. Supreme Court this winter and on on January 22 got an answer: no. Without going deeply into the matter, the Court let stand the lower court rulings, including the $190,000 damages for copyright infringement assessed by Judge Wollenberg.

The last time I saw Dan O'Neill he had $7.

End of story? Hard to say. If the "Mouse Liberation Front Communique No. 1" appended hereto relates to the case, it appears that it defies not the Supreme Court (which hasn't really paid attention yet) but what some consider a more powerful institution — Walt Disney Productions.

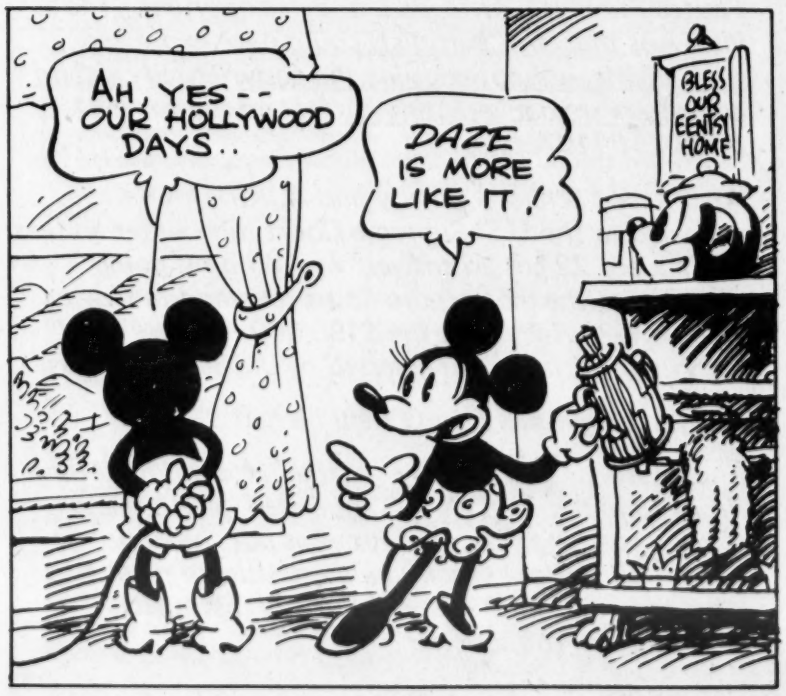
Dan is Irish.

—SB

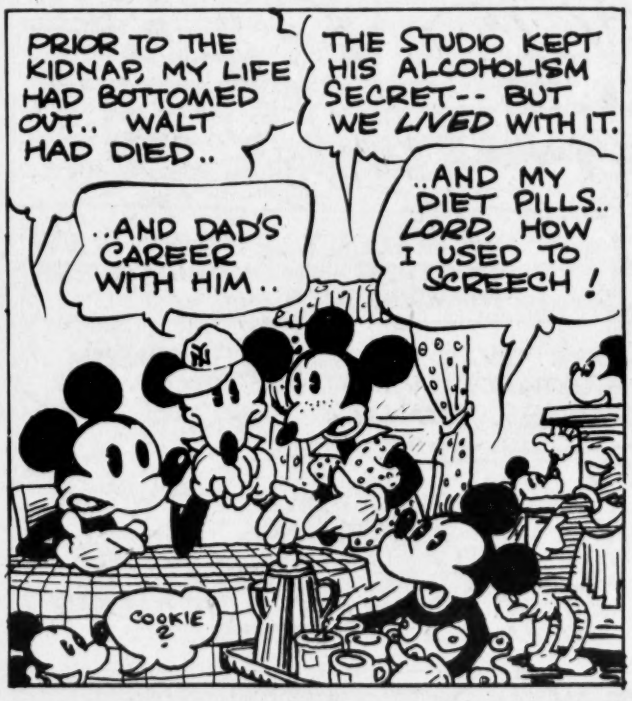
COMMUNIQUE #1
FROM THE
M.L.F.
LADIES AND GENTLEMEN OF THE CO-EVOLUTION QUARTERLY-- GREETINGS FROM THE MOUSE LIBERATION FRONT..
WELCOME TO OUR LITTLE FARM!

YES, FRIENDS.. IT'S TRUE -- WE ARE MR. AND MRS. MICKEY MOUSE!
STRANGELY ENOUGH, IT WAS OUR KIDNAP BY THE AIR PIRATES THAT BROUGHT US TOGETHER!

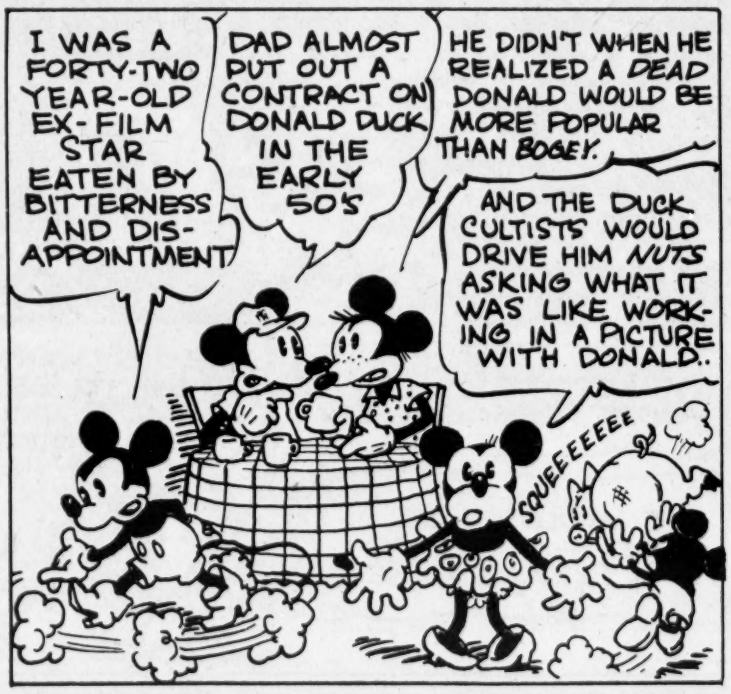
THROUGHOUT THOSE FIVE TERRIBLE MONTHS OF OUR IMPRISONMENT BETWEEN THE PAGES OF HELL COMICS WE CLUNG TO EACH OTHER..
NEVER IN OUR HOLLYWOOD DAYS WERE WE SO CLOSE
HE'S GOT AIR PIRATE STUNNIES!

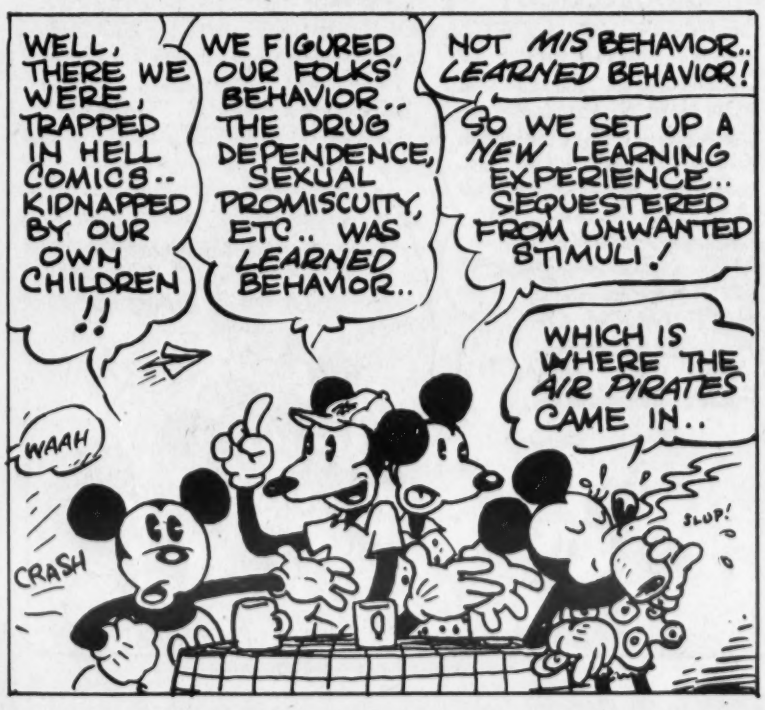

AH, YES -- OUR HOLLYWOOD DAYS..
DAZE IS MORE LIKE IT!
BLESS OUR EENTSY HOME

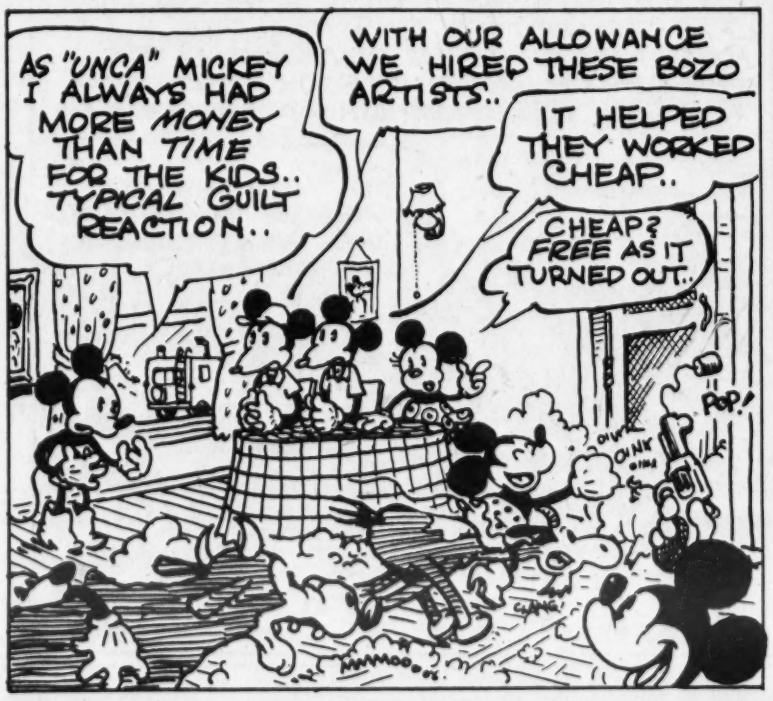
IT CERTAINLY WAS.. ENGAGED FOR FORTY YEARS.. NOW THAT'S UNCONSCIOUS!
IT WAS VERY HARD ON THE CHILDREN -- WE HAD TO INTRODUCE THEM AS "NEPHEWS"



ISN'T IT FUNNY HOW EVEN A SEWER WILL FLOW TO THE SEA ?







"YOU SHOULD TELL THE FOLKS WHERE YOU FOUND THE AIR PIRATES"
WALT DISNEY PRODUCTS
"AMATEUR CARTOONISTS LINED UP EVERY DAY IN FRONT OF DISNEY STUDIOS.. ALL TRYING TO BREAK INTO BIG LEAGUE FILM.."
W.D.P. HOUSE FACT
"WE SIMPLY HIRED THE HUNGRIEST"
DON'T PUSH!
S.S.
P.B.
E.Z.W.
"SUDDENLY, MICKEY AND I WERE BEGINNING THE MOST WONDERFUL ADVENTURE OF OUR LIVES"
GRUNT
"ONCE THEY WERE SAFELY UNDER LOCK AND KEY THE PROGRAM STARTED.. FIRST WE HIT THEM WITH THE PSYCHEDELICS.. KNOCKED OUT THEIR CONDITIONED RESPONSES. ..THE VIDEOTAPES OF THEIR SEXUALITY SEMINARS MADE ALL THE NETWORKS.. EXCEPT THEY WERE CALLED "PORNOGRAPHIC", REMEMBER?
IT WAS MY RELUCTANCE TO ACCEPT MY OWN SEXUALITY THAT WAS PORNOGRAPHY!
WE WERE FIVE MONTHS IN THE OLD SKINNER BOX.. ALL I CAN TELL YOU IS AS SKINNER'S PIGEON FEELS TOWARDS HIS CORN..THAT'S ME AND MINNIE..
" WE WOULDN'T LET THEM SLEEP TOGETHER UNTIL THEY WERE MARRIED.. "
WE WEREN'T UPTIGHT ABOUT PREMARITAL SEX..
WE JUST WANTED THEM TO BE CRAZY ABOUT EACH OTHER..
I ALWAYS THOUGHT OF MY SEXUALITY AS A COMMODITY.. IT WAS HOLLYWOOD ATTITUDES, REALLY..
WE WOULDN'T BE HERE IF IT WASN'T FOR PREMARITAL SEX!
IT WAS RADICAL PSYCH.. BUT WITHIN THE LAW.. DRUGS.. SEX THERAPY.. ALL OF IT! I'M NOT THE FIRST MOUSE TO BE GOONED OUT ON EXOTIC DRUGS.. IT'S NOT ILLEGAL TO GIVE MICE DRUGS..
"AT THIS MOMENT THERE ARE PROBABLY SIX MILLION STONED MICE IN RESEARCH LABS AROUND THE COUNTRY FEELING REAL WEIRD.. NEWS COVERAGE AFTER THE RESCUE MADE IT SOUND LIKE MOM AND DAD WERE MAINLINING HEROIN!
POLICE
SO, WITH THE AIR PIRATES IN CUSTODY, WE WENT BACK TO HOLLYWOOD..
WE WERE AN EMBARRASSMENT BEFORE WE LEFT, WHAT WITH MY DRINKING AND MINNIE'S PILL-CRAZED TANTRUMS.. AND NOW WE WERE RETURNING AS SUPPOSED DRUG ADDICTS AND SEX FREAKS.. SO THERE WAS NOT MUCH OF A WELCOME AND NO NEW FILM OFFERS..
DISNEY STUDIOS DIDN'T BELIEVE ME AND FERDIE SET UP THE SNATCH.. AND INSISTED ON PROSECUTING THE AIR PIRATES..
WE TOLD THEM WE WERE MARRIED.. THEY SAID, "SO IS ZSA ZSA GABOR"!

"THE AIR PIRATES STARTED DOWN THAT LONG ROAD TO THE SUPREME COURT INSISTING THAT THEIR *HELL COMICS* WAS *PARODY*.. THAT WAS EIGHT YEARS AGO..

WE WERE BROKE.. BUT THE STUDIO -- TO AVOID FURTHER EMBARRASSMENT -- OFFERRED US A MODEST RETIREMENT IF WE WOULD LEAVE TOWN..

WHY NOT? --WE LEFT..

WE WANDERED NORTH.. FOUND HUMBOLDT CO. AND HERE WE'VE BEEN EVER SINCE..

WE WOULD HAVE LIVED HERE QUIETLY FOREVER.. BUT THE AIR PIRATES NEEDED US.. SO WE *HAD* TO SPEAK OUT.

"WE WERE NOT, UNFORTUNATELY, SURPRISED AT THE COURT'S DECISION.. IT'S TAKEN THE COURT OVER 200 YEARS TO DISCOVER NEGROES ARE PEOPLE.. AND THEY'RE ONLY *HALF* SURE ABOUT WOMEN. THEY NEVER EVEN *HEARD* OF INDIANS, SO HOW CAN WE EXPECT THEM TO UNDERSTAND *MICE*? NO HARD FEELINGS HERE, WE'RE SLOW LEARNERS, TOO.. BUT EVEN *SLOW* LEARNERS LEARN *EVENTUALLY*.. SO THERE *IS* HOPE..

THE COURT SAYS THE AIR PIRATES "WITH GREAT PRECISION AND ACCURACY" TOOK *TOO MUCH* OF THE ORIGINAL WHEN EFFECTING THEIR PARODY..

NO ONE, INCLUDING THE COURT, IS SURE *HOW MUCH* IS "SOME"..

"SOME" SAYS THE COURT, IS OK...

IS THIS SOME?

IS THIS SOME?

THE AIR PIRATES SAY *ALL* IS "SOME"..

DISNEY SAYS *NONE* IS "SOME"..

THEREFORE, IF *ALL* IS TAKEN, IT'S NO LONGER PARODY, IT'S *COPYRIGHT VIOLATION*..

STILL, IN THE SQUABBLE, EVERYONE MISSED THE *REAL NEWS*..

TELL THE FOLKS OUT THERE WHAT IT MEANS WHEN THE SUPREME COURT SAYS I AM *NOT* A PARODY..

IT MEANS, FOLKS, IT MEANS *DISNEY WINS!* THE SUPREME COURT GUARANTEES THAT THE MOUSE YOU SEE BEFORE YOU IS MY DAD -- THE ONE AND ONLY *MICKEY MOUSE!* NOT A PARODY!!

IN THE NAME OF *MOUSE LIBERATION FRONT* I PRESENT OUR FIRST TWO DEMANDS.. AND REMEMBER, KIDS, I'M *MICKEY MOUSE*! I DON'T FOOL AROUND..

..IS THIS SOME MORE?

MLF DEMAND #1

THE AIR PIRATES ARE NOW $190,000 HUNGRIER AND NEED WORK. DISNE SHALL IMMEDIATELY DROP ALL LEGAL ACTIONS TOWARDS THE AIR PIRATES AND ENT ER INTO A JOINT VEN TURE (SUCH AS RE-BUILDING CLEVELAND.. MAKING FILMS.. WHAT-EVER!) AIR PIRATES CANNOT BE PROUD AND $190,000 IN THE RED..

MLF DEMAND #2

THE AIR PIRATES, NOW RECOGNIZED BY THE SUPREME COURT AS DISNEY-STYLE ARTISTS OF "GREAT PRECISION AND ACCURACY" PROMISE NOT TO DO ANY MORE MOUSE-EATING-SNOT JOKES AND SETTLE DOWN TO MAKING BIG BUCKS FOR DISNEY DOING WEIRD MOVIES TO PAY OFF THAT $190,000...

..AND NOW IT'S TIME TO SAY GOOD-BYE TO ALL OUR COMPANY..

EM EYE SEE

..SEE YA REAL SOON!

KAY EE WHY

WHY? BECAUSE WE *LOVE* YOU!!

EM OH YOU ESS EEE

SOAP

MLF SIGNING OFF FOR NOW.. WE HOPE WE BROUGHT YOU SOME UNDERSTANDING OF *PARODY*.. WE END THIS COMMUNIQUE BY ELEVATING TO A TRUE *IRONY*: THE PRECEDING COMIC STRIP IS A FEDERAL CRIME -- CONTEMPT OF THE SUPREME COURT OF THE UNITED STATES.

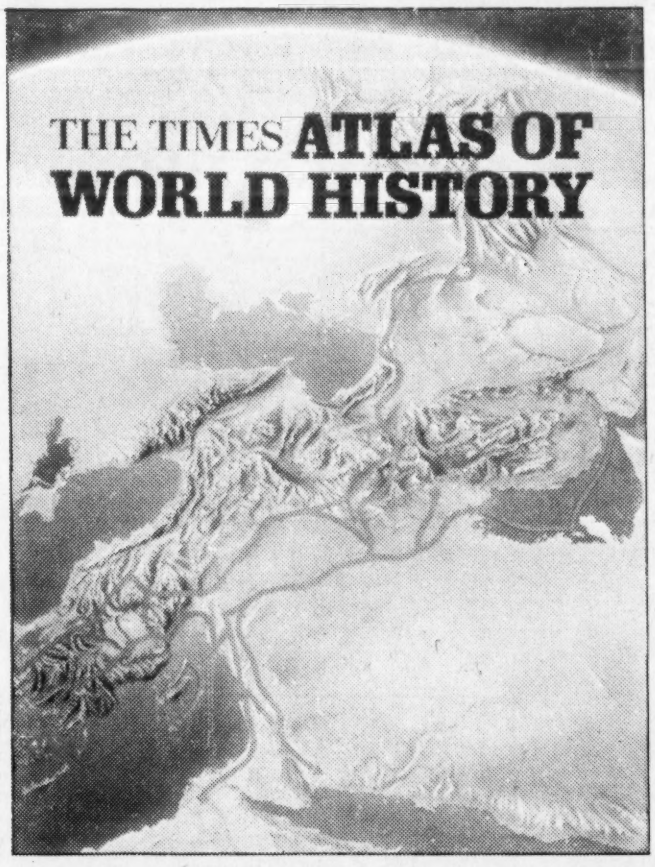
HOW'S THAT FOR A PUNCH LINE, KIDS?

© DAN O'NEILL 1979

DAN O'NEILL

Box 428, Sausalito, CA 94965

Understanding Whole Systems



The Times Atlas of World History

Most engrossing new reference book in decades.

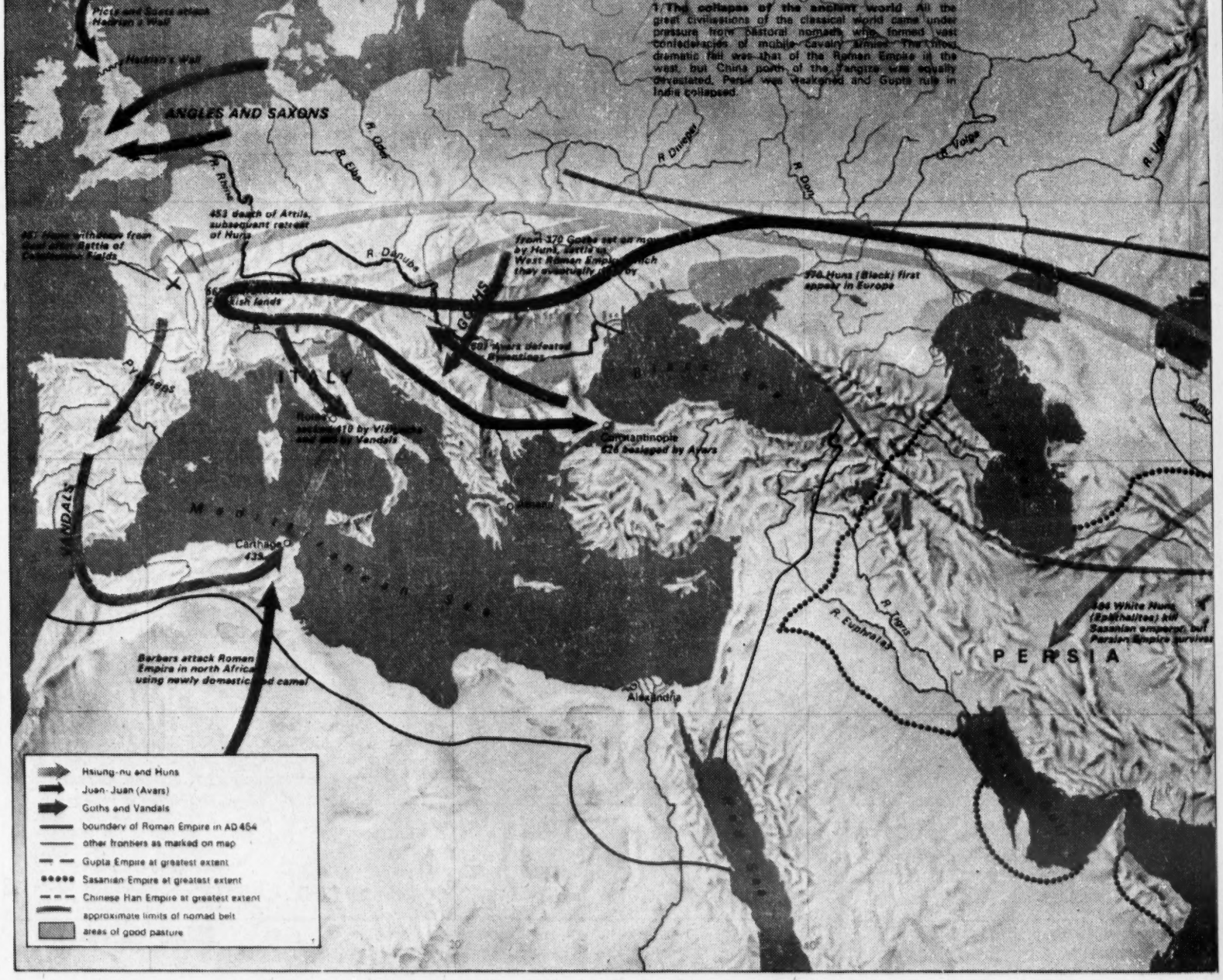
Fine idea magnificently carried through. On planetary scale human history has a unity-within-boggling-variety, a headlong pace and sweep that puts our time in less frightening perspective. Praise be, the coverage of the volume corrects generations of Europe-centered versions of history (for example, Charlemagne's capital at Aix-la-Chapelle in 790 A.D. is shown in puny contrast to other capitals of the time — Ch'ang-an in China, Baghdad, Constantinople, and even Cordoba.

For me the volume is packed with news: complex fascinating sub-plots in regions I've scarcely thought of (the current uproar in the Mideast is minor compared to the centuries of surging conflict there); the continent-changing impact of social inventions such as plow agriculture, new cavalry and military intelligence tactics (Mongol tribesmen), aggressive religion (Christianity, Islam), ocean navigation (Spain and Portugal), joint-stock companies for foreign trade (Holland and England); and recent re-interpretations of familiar events (the Minoan civilization in Crete fell 50 years after *the great earthquake of 1500 B.C., torched by conquerors from the mainland). Throughout, each map is ingeniously presented from the perspective of the time and people involved.*

You read enough history in this dynamic a form and pretty soon you want to do some.

—SB

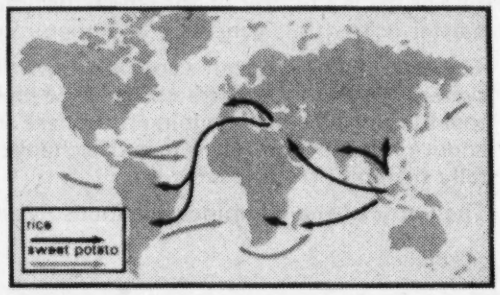
The Collapse of the ancient world in the 5th Century A.D. All the great civilisations of the classical world came under pressure from pastoral nomads who formed vast confederacies of mobile cavalry

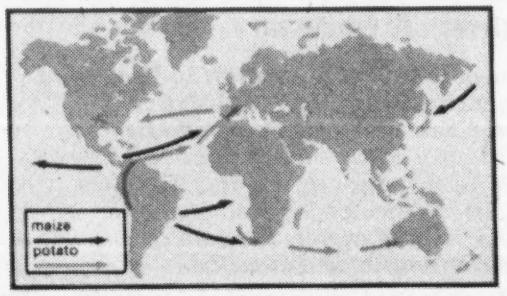


The Times Atlas of World History
Geoffrey Barraclough, Ed.
1978; 360 pp.
$50.00 postpaid

from:
Hammond, Inc.
515 Valley St.
Maplewood, NJ 07040
or Whole Earth

The spread of food plants — almost all domesticated by prehistoric man in various parts of the world — had proceeded slowly until 1500, when they were transplanted to every continent. In addition, the American Indians were responsible for two major cash crops: tobacco and cotton (derived largely in its commercial form from varieties they had domesticated, though other species were known and used in the Orient before 1500). Cane sugar, introduced by Europeans into Brazil and the West Indies about 1640, also quickly became a staple of foreign trade.



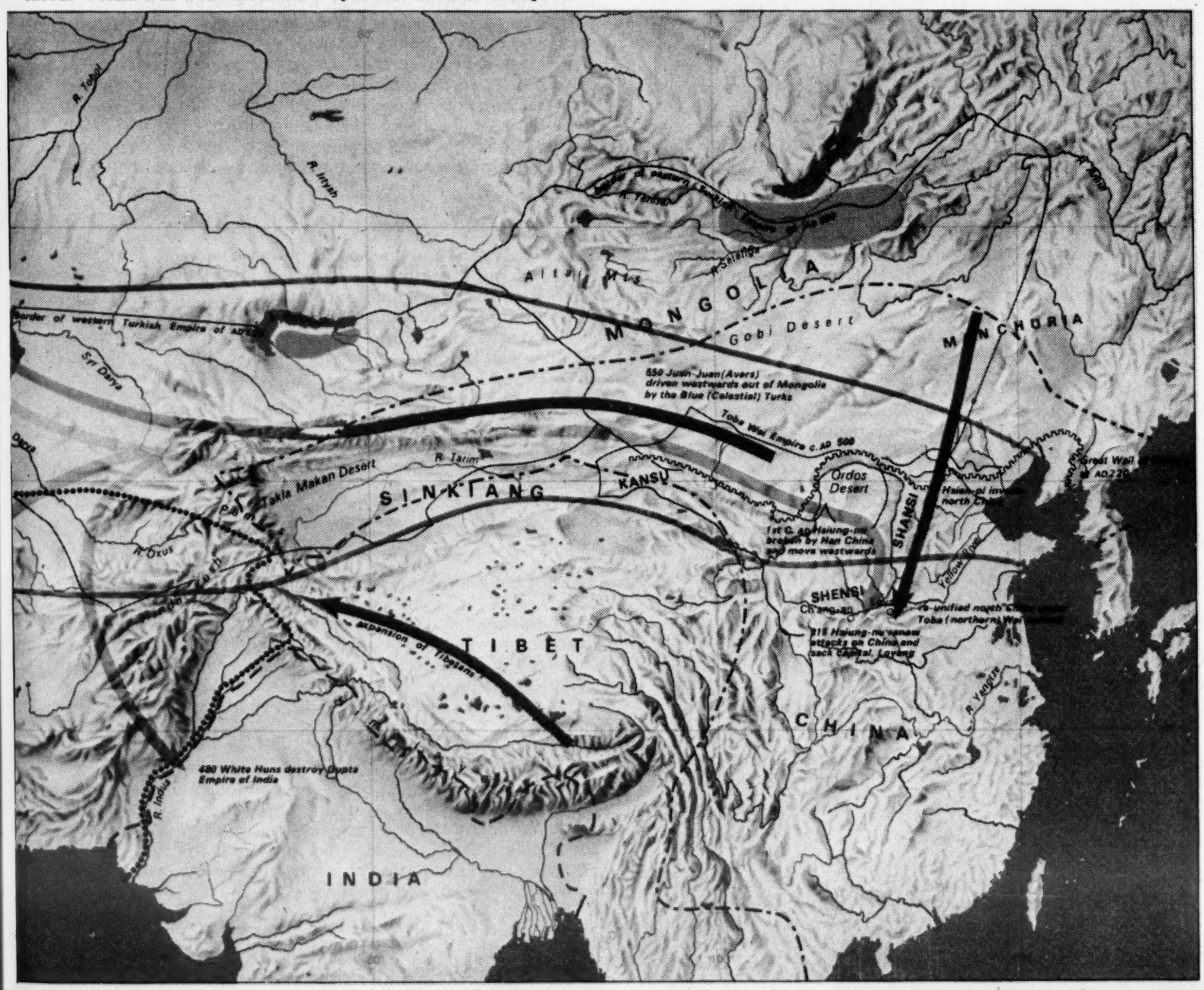


This interchange of plants produced an enormous increase in food supplies, which made possible the unprecedented increase of human populations in modern times. It also initiated a corresponding increase in intercontinental trade. Before 1500, this trade had been limited to Eurasia and Africa, and involved mostly luxury goods; after 1500, the combination of regional economic specialisation and improvements in sea transport made possible the gradual transformation of the limited mediaeval luxury trade into the modern mass trade of new bulky necessities.

•

The conflict of Church and State is a capital fact in European history. Elsewhere kings and priests tended to work in harmony, and the result was a 'monolithic' society. In Europe, particularly in western Europe, the co-existence of two powers helped to promote the emergence of 'pluralistic' societies, in which the individual had to balance the different claims made on his allegiance. Here were the distant origins of modern individualism.

armies. The most dramatic fall was that of the Roman Empire in the west, but China north of the Yangtze was equally devastated. Persia was weakened and Gupta rule in India collapsed.



Mind and Nature: A Necessary Unity

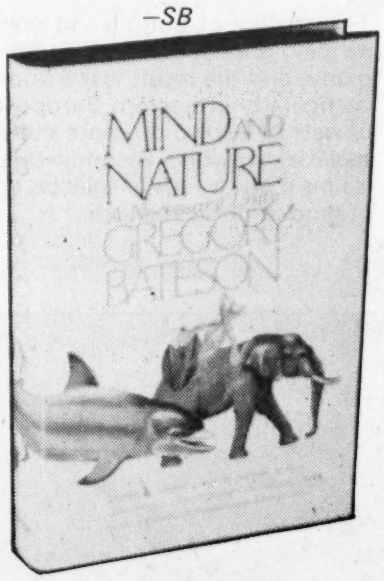
All of Bateson's previous writing — Steps to an Ecology of Mind, Naven, Communications: The Social Matrix of Psychiatry, Balinese Character — *has been addressed to various audiences of specialists. Though this book has compelling news for his loyal audiences, it is addressed to a general readership. It is new thought in an old virtue — the use of fine original writing to express ideas whose excellence is embedded in the clarity of their expression.*

The matter of the book is the hidden, though unoccult, dynamics of life — the misapprehension of which threatens to unhorse our civilization. There's lotsa books that attempt that; none I know of that succeed so comprehensively. Bateson doesn't have all the answers, he just has better questions — elegant, mature, embarrassing questions that tweak the quick of things.

One of the themes that emerge is the near-identity between the process of evolving and the process of learning, and the on-going responsibility they have for each other which includes our responsibility, which we have shirked. We shirked it through ignorance. Mind and Nature *dispells that.*

—SB

Mind and Nature
(A Necessary Unity)
Gregory Bateson
1979; 277 pp.
$11.95 postpaid
from:
E.P. Dutton
2 Park Ave.
New York, NY 10016
or Whole Earth



Human sense organs can receive *only* news of difference, and the differences must be coded into events in *time* (i.e., into *changes*) in order to be perceptible. Ordinary static differences that remain constant for more than a few seconds become perceptible only by scanning.

•

1. *A mind is an aggregate of interacting parts or components.*

2. *The interaction between parts of mind is triggered by difference,* and difference is a nonsubstantial phenomenon not located in space or time; difference is related to negentropy and entropy rather than to energy.

3. *Mental process requires collateral energy.*

4. *Mental process requires circular (or more complex) chains of determination.*

5. *In mental process, the effects of difference are to be regarded as transforms (i.e., coded versions) of events which preceded them.* The rules of such transformation must be comparatively stable (i.e., more stable than their content) but are themselves subject to transformation.

6. *The description and classification of these processes of transformation discloses a hierarchy of logical types immanent in the phenomena.*

I shall argue that the phenomena which we call *thought, evolution, ecology, life, learning,* and the like occur only in systems that satisfy these criteria.

•

This analogy between the social system and the natural world is the religion that anthropologists call *totemism*. As analogy, it is both more appropriate and more healthy than the analogy, familiar to us, which would liken people and society to nineteenth-century machines.

•

It is a nontrivial matter that we are almost always unaware of trends in our changes of state. There is a quasi-scientific fable that if you can get a frog to sit quietly in a saucepan of cold water, and if you then raise the temperature of the water very slowly and smoothly so that there is no moment *marked* to be the moment at which the frog should jump, he will never jump. He will get boiled. Is the human species changing its own environment with slowly increasing pollution and rotting its mind with slowly deteriorating religion and education in such a saucepan?

•

We face, then, two great stochastic systems that are partly in interaction and partly isolated from each other. One system is within the individual and is called *learning*; the other is immanent in heredity and in populations and is called *evolution*. One is a matter of the single lifetime; the other is a matter of multiple generations of many individuals.

The task of this chapter is to show how these two stochastic systems, working at different levels of logical typing, fit together into a single ongoing biosphere that could not endure if either somatic or genetic change were fundamentally different from what it is.

The *unity* of the combined system is *necessary*.

•

It is very easy to fall into the notion that if the new is viable, then there must have been something wrong with the old. This view, to which organisms already suffering the pathologies of overrapid, frantic social change are inevitably prone, is, of course, mostly nonsense. What is *always* important is to be sure that the new is not *worse* than the old. It is still not certain that a society containing the internal combustion engine can be viable or that electronic communication devices such as television are compatible with the aggressive intraspecies competition generated by the Industrial Revolution. Other things being equal (which is not often the case), the old, which has been somewhat tested, is more likely to be viable than the new, which has not been tested at all.

•

Ross Ashby long ago pointed out that no system (neither computer nor organism) can produce anything *new* unless the system contains some source of the random. In the computer, this will be a random-number generator which will ensure that the "seeking," trial-and-error moves of the machine will ultimately cover all the possibilities of the set to be explored. . . .

This does not mean, by the way, that all divergent processes are stochastic. For that, the process requires not only access to the random but also a built-in comparator that in evolution is called "natural selection" and in thought "preference" or "reinforcement."

•

I do not believe that the original purpose of the rain dance was to make "it" rain. I suspect that that is a degenerate misunderstanding of a much more profound religious need: to affirm membership in what we may call the *ecological tautology*, the eternal verities of life and environment. There's always a tendency — almost a need — to vulgarize religion, to turn it into entertainment or politics or magic or "power."

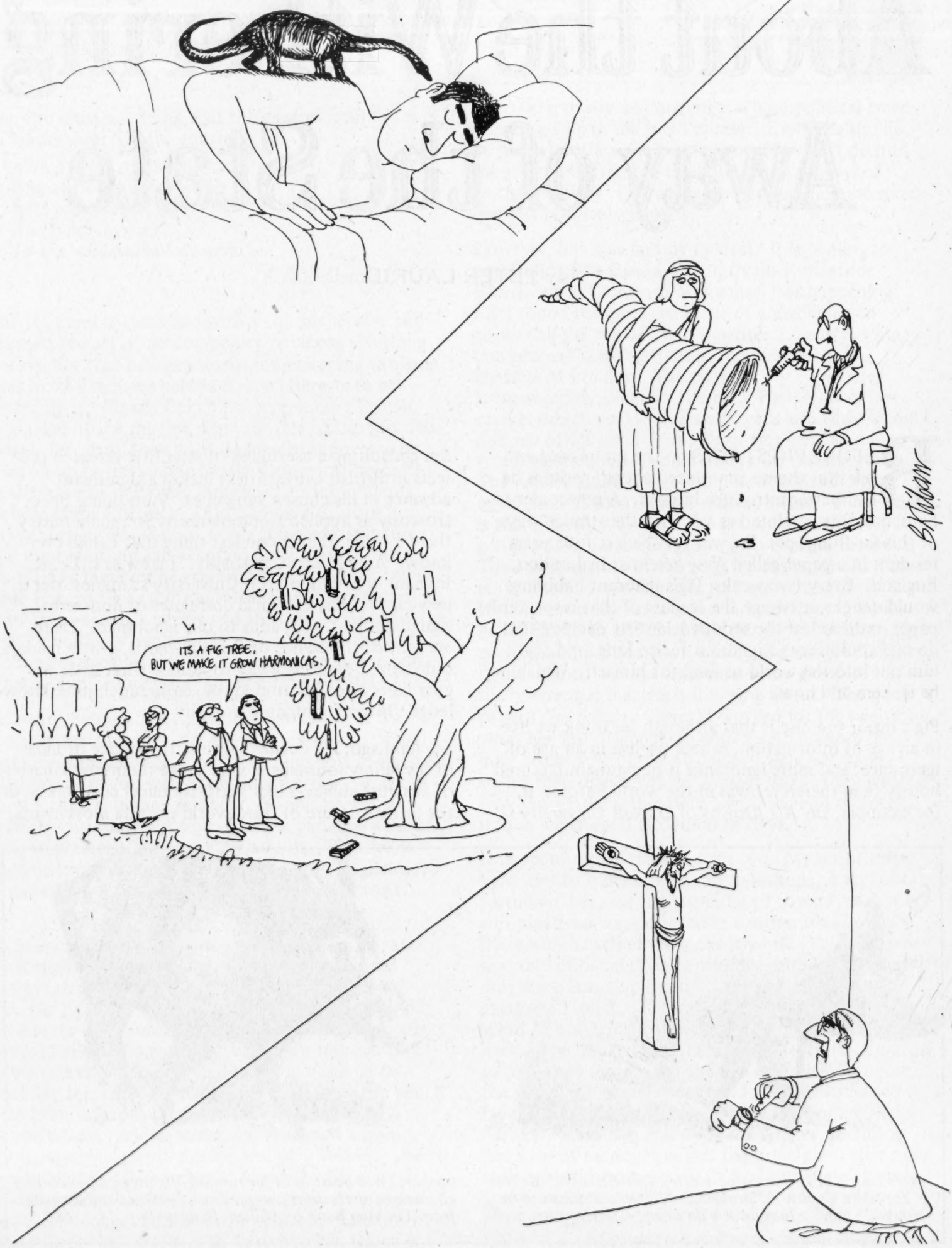
•

Epistemology. A branch of science combined with a branch of philosophy. As science, epistemology is the study of how particular organisms or aggregates of organisms *know, think,* and *decide*. As philosophy, epistemology is the study of the necessary limits and other characteristics of the processes of knowing, thinking, and deciding.

•

Information. Any difference that makes a difference.

Dinosaurs whisper *by B. Kliban*



PIG IGNORANT:

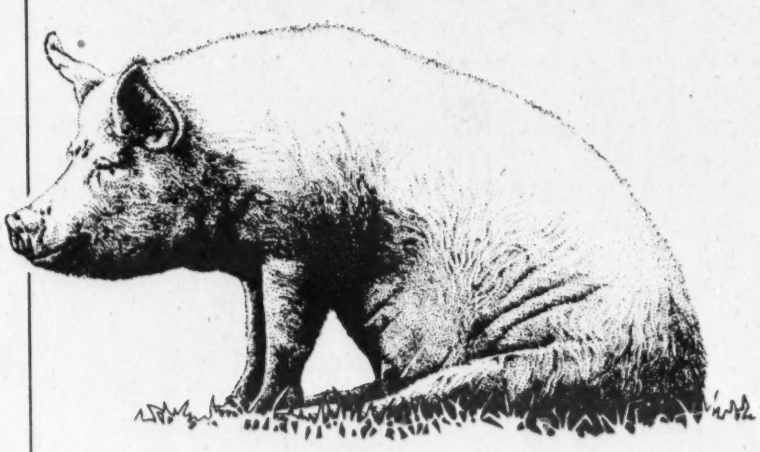
About the Withering Away of the State

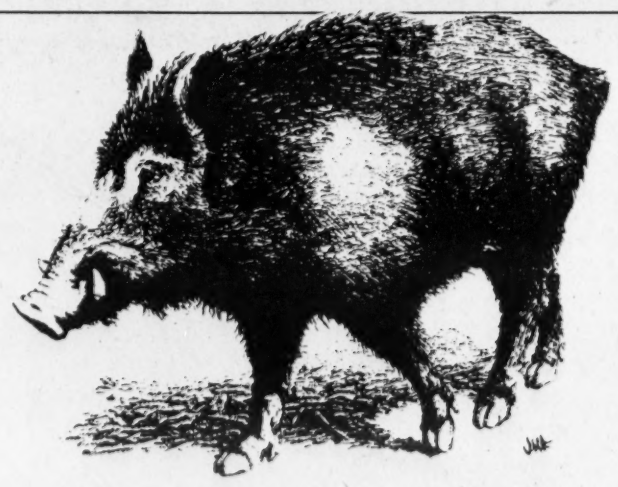
BY PETER LAURIE

BEFORE PIG STARTS on the interesting and relevant theme announced above, perhaps he had better introduce himself. A newcomer to Sausalito, unacquainted as yet with the strange ways of this far-flung spot, Pig was for the last four years resident in a paper called *New Scientist* in London, England. Every two weeks, Pig's ignorant babblings would delight or enrage the readers of that respectable paper, until at last the serious scientists decided that no one could stay so ignorant for so long, and sent him out into the world to fend for himself. Which he is, here and now.

Pig's major premise is that although we think we live in an age of information, in fact we live in an age of ignorance, and more ignorance is being manufactured hourly than there ever was in the world before. If, for example, Dr. A.J. Downs of Oxford University (I am consulting a useful list of scientific research projects in British Universities) makes a significant advance in his chosen subject of 'Vibrational Spectroscopy as applied to problems of Stereochemistry' this morning, that is one less thing that I shall ever know. And you too, probably. Likewise if Dr. R. Ingham of Southampton University stumbles over a new fact in 'Physiological correlates of non-verbal signalling' that, too, adds to our ignorance. There are tens of thousands of these bastards, gentle readers, out there, beavering away to reduce what little we guardians of civilisation know, to so much junk knowledge. It is a frightening thought.

So, long ago, Pig decided against the stance of most of his fellow journalists, who make themselves masters of abstruse subjects like petro-chemical economics, or the infrastructure of third world guerilla movements,





Peter Laurie before and after leaving New Scientist. *Before, a Yorkshire Barrow – "prolific and notably pleasant to be around." Now, a European Wild Boar – "sleek, stout, well-proportioned beast built for running, fighting and executing all manner of vigorous porcine feats." (Notes and drawings from* The Hog Book *by William Hedgepeth.)* –SB

and decided to be ignorant. He goes around with his mouth open and a glazed look in the eye, saying 'Whaaa?' and 'Could you spray that again?' It is quite soothing, that when you get down to it most experts are as ignorant as you are, even about their own subjects. We all know nothing about everything! A liberating thought.

The Plain Men of Science: *We thought we had heard the last of this stupid fellow.*

Myself: *Alas, no.*

But you must not think that the porcine cranium is an empty one. On the contrary:

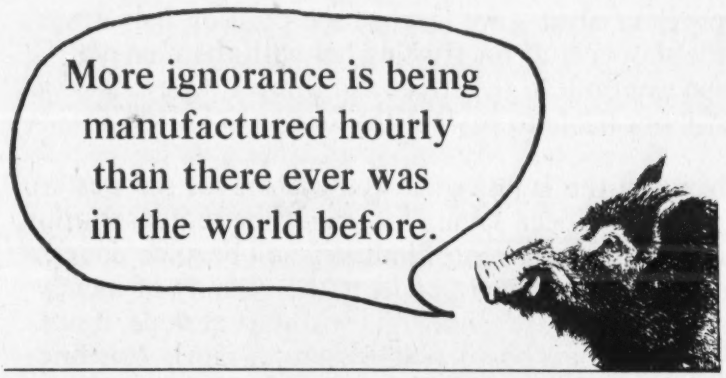
With a heart of furious fancies
Whereof I am commander
With a burning spear
And a horse of air
To the wilderness I wander.

T. O'Bedlam

The pig mind is furnished with a comprehensive and interweaved set of contemporary paranoia. Nothing occurs, but that he has a ready and sickening explanation for the motives behind it, the interests to be served by it. Claude Cockburn, a crusading British journalist of the thirties, who was one of the very few people who could see what was really happening on the run-up to the second World War, learnt his craft at the knee of the *Times* American correspondent, (whose name I forget). This man used to sit in his office, never telephoning, never going out, but filing the most startling and accurate news stories. Cockburn asked him how he achieved this apparently impossible feat, and was told that it was simply necessary to read the morning's papers and then try to imagine the most revoltingly cynical tale of corruption and self-interest that could give rise to the stories in them. That would be an approximation to the truth.

So, information, or its converse, ignorance, is the least of one's problems in the modern world. What one needs is understanding. Now, this sort of understanding – as you well know, in America – is apt to have a clinical name: paranoia. Simple paranoia enables you to understand; creative paranoia enables you to predict. This is the malady that Pig tries to cultivate, even though here in nice, calm England, it tends to have a social effect like B.O. or halitosis.

So much for introductions. This piece is announced as being about the withering away of the state, and so it shall be, so it shall be. Up till now, this has always struck me as one of the more amusing and fanciful of Marx's notions: that communism would so elevate the human spirit that the bonds of the state would become unnecessary, either for internal discipline or external defence. From what one could actually see, the state throve in those countries which had been unhappy enough to get converted to communism. Added to the drawbacks of a boring landscape, inclement climate and ugly women, which seem to mark all communist countries, there went a most virulent, extensive and oppressive state apparatus. The longer communism went on, the more state there was. For a High Tory like Pig, which is



to say practically an Anarchist, whose political creed is summed up in the lucid phrase: 'Everyone should do just what they want as long as they don't do it in the street and frighten the horses,' the process of 'withering away' that contemporary communist states enjoy is positively chilling.

However, one was unduly cynical. It *is* coming to pass, but not in Russia, not in Byelo-Russia, nor Rumania nor China nor Mongolia. It is happening right round me here, the rattle of a machine gun answering the tap of my typewriter . . . sorry – no one gets as excited as that in the Western postal districts of London. The rattle of my typewriter is answered by silence. The busy Portobello Street market which usually roars and yells and whistles outside my office window is still (if this were an audio-visual medium, you would notice the uncanny silence.) The reason today is a national lorry drivers' strike which is coincident with a railway strike. The result is that no office workers can get into London, no goods and manufactures can reach or leave factories. The economic life of the country has stopped. The government is quite unable to do anything about it. If it were not the drivers and railway men, it would be the postmen and the bank clerks or the electricity persons and the dustmen, or the rat catchers and the fighter pilots. All the time now some group of relatively essential menials is lounging about. The newspaper (*The Sunday Times*) I worked for for twelve years has just disappeared with a gulp because the inky attendants of the machinery were not happy with a mere five times the average wage: they wanted ten. We are daily threatened with the end of civilization as we know it and *nobody cares.*

It happens on a domestic scale too. My unfortunate wife tries to run a couple of small shops. I say 'unfortunate' because the structure of commerce as it is still practiced was designed in tougher times when there were sanctions to make it work. Yesterday she sent one of her staff, a personable, intelligent 17 year old, three doors up the road to buy sandwiches for everyone's lunch. The child was given a £5 note, she spent £2 and so had three £1 notes clutched in her hand. The bag holding the sandwiches burst. In order to pick them up she put the three pounds down on the wet and busy pavement and then walked away from the cash. Even at the present rate of exchange between the dollar and the pound, three pounds is not a lot of money, but it is the principle – that principle against which we adults find our backs tighter and yet more tightly pressed. After a long and passionate debate in which her parents joined – her father is a well-respected and extremely well-paid

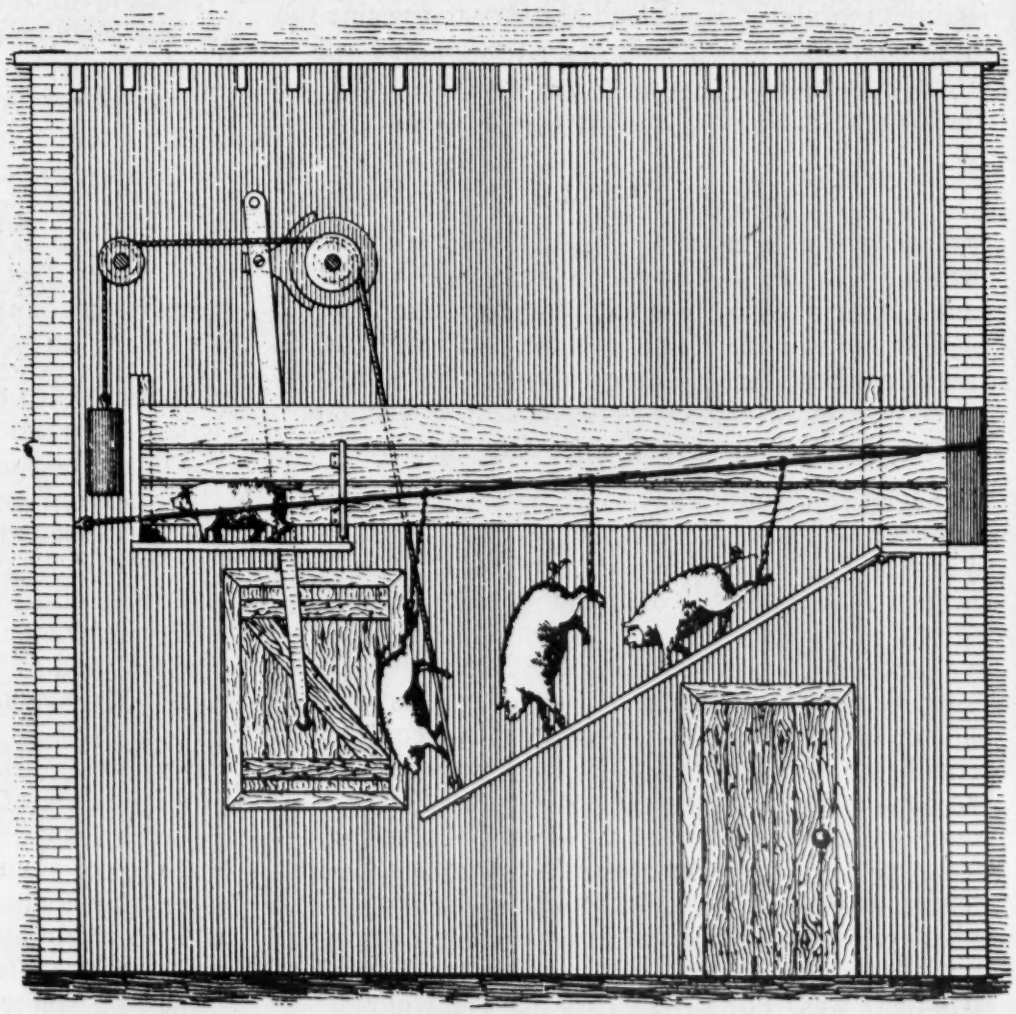
psychoanalyst – we reached the position that it was the shop's fault for trusting her with the money. If she went out in the street and threw it away, she was still not liable to pay for the loss.

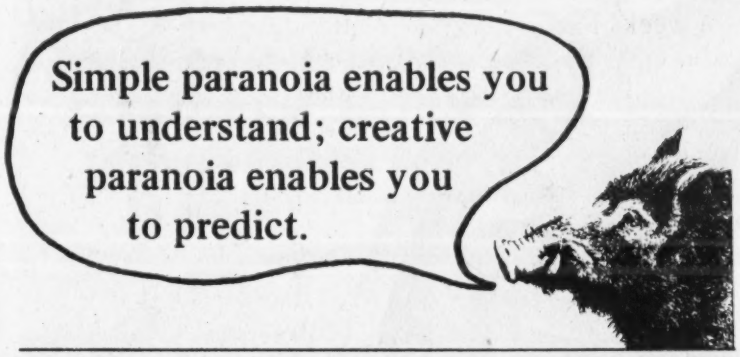
Now, all this is just what well-wishers for the western world have been saying for years: the tedious, boring, tiring, pointless jobs of industry will become unnecessary. We will be freed from the tyranny of money and duty and the millenium will start at once, if not sooner (unless postponed because of rain). It is fine in theory; it is rather alarming to find it happening spontaneously and that before a workable alternative system has been run in. At such times I feel like that precocious child in *Paper Moon* who shouts in the cafe: 'Give me MY TWO HUNDRED *DOLLARS!*'

Pig's theory of the western economies, enunciated to stoney unbelief seven years ago, is now being admitted on all hands to be miraculously percipient. It runs roughly thus: the industrial revolution, two hundred years ago, hinged on the invention of simple, stupid machines such as lathes, ships, railroad engines, printing presses, etc. As an entrepreneur, the more stupid machines you got together, the more half-educated workers you set to running them, the more profit you made. Result: populations shot up in the industrialized nations; education rose so that the vast mass could read 'on' and 'off'. As machines got more expensive and complicated, so a form of democracy was introduced to make people feel they were partners in the industrial system. After all, you do not want the guy driving a bulldozer or a steamhammer to feel oppressed to the point of direct action. As the investment in education and training rose, it paid the system to take over human maintenance as well. We had the National Health Service, and the apparent cosiness of the welfare state. However, it was still necessary to have a small crew of poor who reminded the rest what happened if you didn't turn up at the factory gates. (One of the minor but extremely interesting questions is how the system managed to combine apparent welfare for all, with actual poverty for the designated examples.)

So far so good. Then industry starts to overreach itself. Long before the computer, it started in on labour saving. To begin with this process increases profits by increasing productivity; after a bit it is counter productive. Why? Because it gradually raises the level of intelligence at which it is worth employing people. For example: we go to stay in a ramshackle cottage in Dorset. Outside the front door there were, seven years ago, a dozen handsome elms. They succumbed to the Dutch Elm disease. They fell down and were sold to a timber merchant. When I was young, it would have taken a crew of ten men a couple of weeks to shift them. On the day, one teenager arrived with power saws and a 15 ton lorry with a hydraulic crane, cut up and loaded all the trees in a couple of days. All over industry clever people are beavering away to put the less clever out of work. I should estimate that about half the British work force is in 'pretend jobs' – they go into work and lounge around, drink tea, read the paper, fill in forms, and then go home. It suits the British system better to handle things this way than to have them out on the street rushing about, having to be restrained by police and security services. Employment becomes a species of day prison.

The result is that we have a much smaller economy than openly appears, which has to carry an equal number of people who do nothing. If it were not for British love of peace and quiet, barbed wire would go up round the factories and offices that were still doing something and the dim lower 50% would be thrust out, to live on handouts thrown over the wire. When I first suggested this, the wiseacres shook their heads and said, 'You're forgetting a basic fact of economics: industry needs markets. Every economic student knows *that!*' What a silly-billy I was. Well, I didn't think so at the time, and it now appears I was not at all. No one asked what industry needed markets *for*. If you make, God forbid, hula hoops, you expect to get a 10% profit. You do not set up a hula hoop factory because you want to keep by you one in every ten hoops. You do it because the economic system lets you turn your 10% into fast cars and beautiful women. It does this because the people who buy the hula hoops make the fast cars and b.w.; they have to produce what *you* want in order to buy





what *they* want – which is hula hoops. Your market for hoops is only necessary because you want what it makes. If, as is now turning out, the people who buy hula hoops are too dim to make anything in competition with automated industry, this causes what may become an explosive collapse of the economy. After all, if you don't want hula hoops because you can get the Rolls Royce you would have bought with the profit by going straight to the Rolls-Royce-making-computer, you don't want the hula hoop work force. It then becomes pointless in the classical economic sense to be making bread, socks, television programmes for these now useless workers. So the other workers who made these things also become redundant. The people who made things for them become redundant too in rapid succession.

Automation, computing, data processing, artificial intelligence – call it what you will – is fast eliminating anyone but the bright from the British economy. And from yours, too, for all I know. The result is slowly dawning on government and big business: they are going to have to deal with about 13 million cross people who have been born, educated and brought up to lend part of their brains to stupid machinery and are now not wanted. Who are in fact, a liability.

It is a nasty thought which reminds one of Herman Kahn's (remember that unpleasantly plump thinker of the unthinkable?) 'A country' and 'B country': the two nations which locked together like a jigsaw puzzle, yet reacted so differently to nuclear war.

What is one to do about this unpleasant state of affairs? There seem two solutions: the quick one and the slow one. In the quick one, the nuclear powers – having dispersed their governments, essential factories, offices and computers to safe underground rural sites as part of their Civil Defence programmes, then take out each other's surplus urban populations. Please God (though I doubt it) we shall be allowed to take the slow way, in which a drastically reduced birth rate lets the unnecessary industrial proletariat dwindle away. This cannot work in less than 50 years: to get through that dangerous period we have to slow down the rate of change, we have to resist the twenty-first century, drag our feet, kick and squeal. So it is with calm I view the strikes that bedevil our industry and strangle our economy. It could be much worse otherwise.

It is a paradoxical thought that what may save us is the extremely labour-intensive arms industry . . .

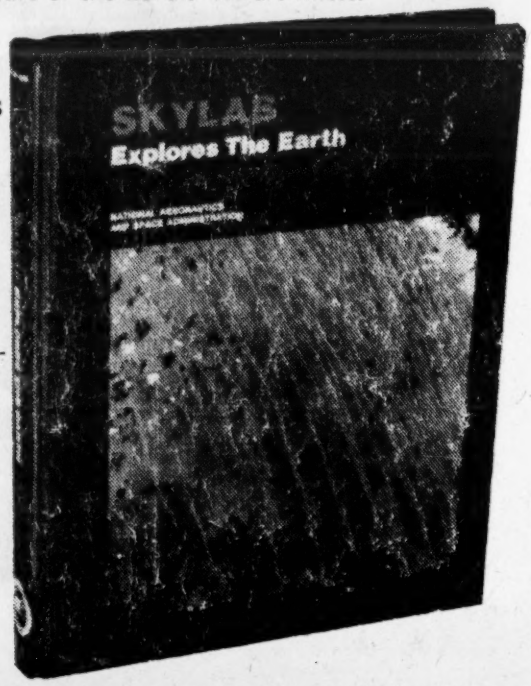
The Plain Men of Science: *It is ridiculous that such immature drivel should be foisted on a witless – no, credulous public. Cannot the American authorities take some action?* ■

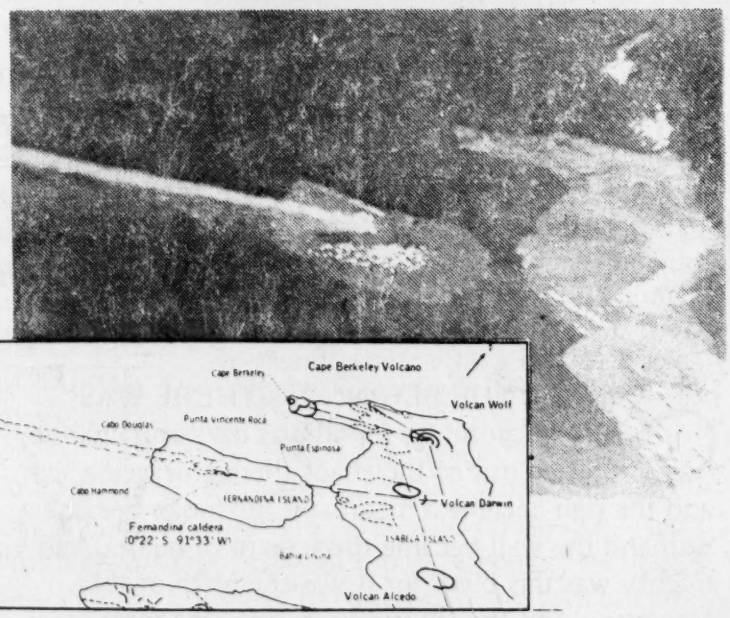
Skylab Explores the Earth

Photos of the Earth from space have always been grand, fascinating, lovely. This book makes them understandable. From innumerable color plates (the most gorgeous yet), you learn to read the graphic news of geology, oceanography, meteorology, agriculture, development, pollution. This is the large-scale texture of the Earth. We are mites.

–SB

Skylab Explores the Earth
NASA Lyndon B. Johnson Space Center
1977; 517 pp.
$15 postpaid
from:
Government Printing Office
Washington, D.C. 20402



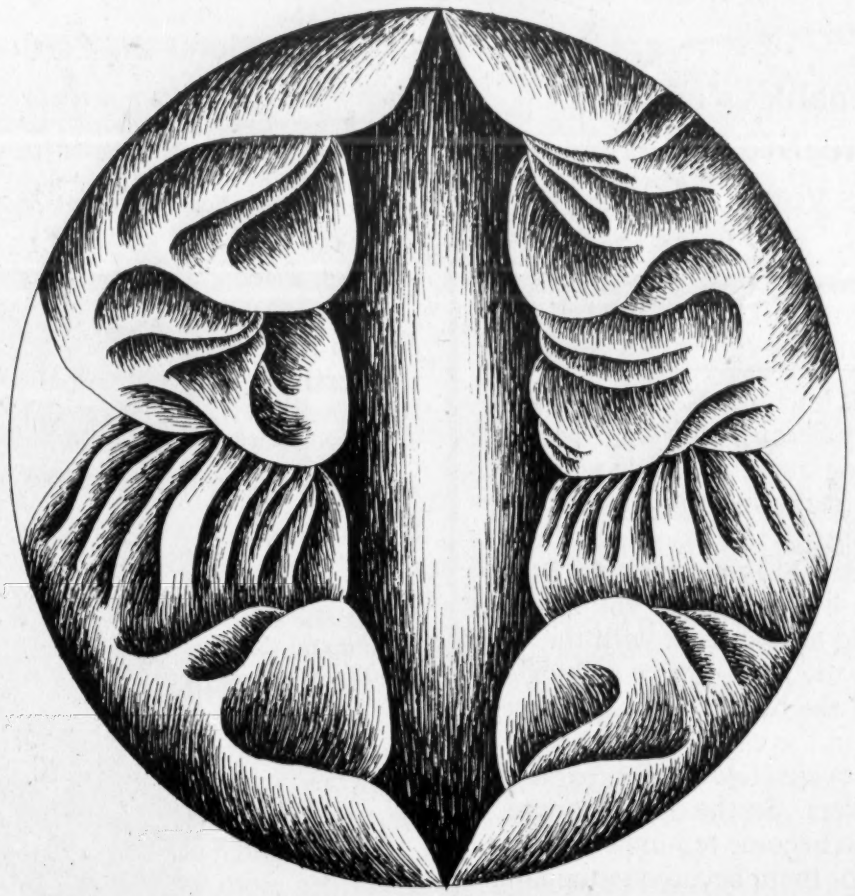


Eruption cloud from Fernandina Volcano in the Galapagos Islands.

The Opening of a New Planet

The day the asphalt-eaters came
My people were happy. Some watching TV,
Some hitting small balls, nobody needing,
Nobody asking. Me I had a headache and
Couldn't finish the story I was reading
About two women in love with one man
So happened to be looking out the window
When the flying dinner plate, huge like
A city, hovered outside and put down
A hummingbird snout. It went
Right in the hot tar of the street.
Everything began to move. Ashcans,
Lampposts, manholes, parking meters.
My people ran. The cities were empty.
Only loose gravel, steel twist, the rats.
They had the expressways, were spooling in
Country roads – no end to their dark needs.
At last they came to talk, told us not to worry,
They had brought plenty mirrors, plenty glass beads.

–Will Baker



Gaea

Revelations of the Goddess

by Judy Chicago

IN THE BEGINNING THERE WAS nothing, for all was dark and chaotic. Then out of the chaos there emerged a sigh and the sigh became a moan and the moan became a wail and the wail became the scream of birth. And mighty was this birth for it was the birth of the Universe. And the Universe was brought forth in the pain and the struggle which would forever accompany the creation of life. The screams of its birth sent forth circles of sound into the blackness. And the circles of sound whirled through the void forming a great shape and this was the shape of the Universe. And still the cries of birth continued to spin out into the darkness until the whole of the Universe was filled with the sound of them and began to pulse. And this pulsing was the rhythm of labor. The throbbing waves of sound continued until the entire Universe was expanding and contracting as it endeavored to realize its own being. And out of this great labor were born all of the planets and they were the daughters of the Universe and this was the work of the first day.

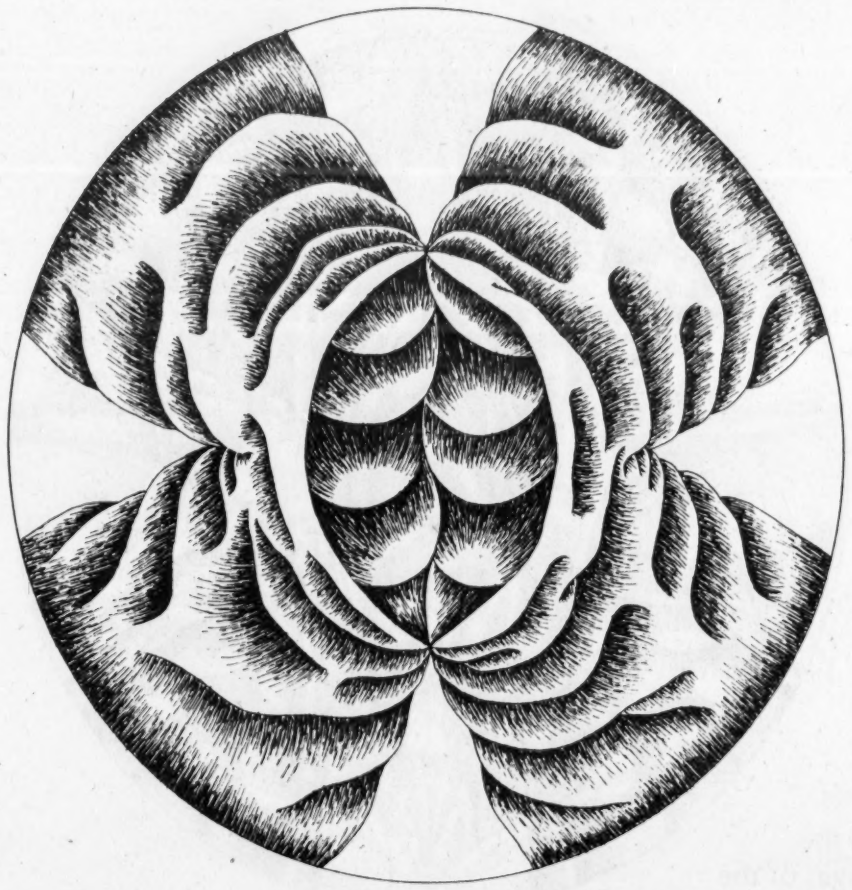
Judy Chicago has previously been best known for her vulvar/floral mandala paintings, her co-founding of the Women's Building in L.A., and her autobiography, **Through the Flower.** *This is bound to change now that "The Dinner Party" has opened at the San Francisco Museum of Modern Art. When I asked her what* **CQ** *might do to help celebrate the occasion – that wouldn't duplicate others' celebrations – she replied that "The Dinner Party" was one element of an even larger undertaking, the construction of a symbolic history of women, and that history naturally begins with a creation myth. Would we be interested in publishing excerpts from that myth? Sure, I said, and along with the text she sent copies of the original working drawings for five of her hand-carved and -painted china dinnerplates in the exhibition, four of them commemorating figures mentioned in the excerpts.*

– Robert Horvitz

"The Dinner Party Project includes thirty-nine china painted plates, placed on a fully-set, open triangular table, 46-1/2 feet on a side. The plates, which combine innovative ceramic techniques with traditional painted china processes, represent mythic female characters and historic figures who have made a contribution to women's lives throughout history. The figures are archetypal representations of the whole range of women's achievements throughout history; scientists, rulers, writers, artists, composers, doctors, and scholars."

– Judy Chicago ("The Dinner Party" opened March 16 and will run through June)

Fertile Goddess



Among the planets born on the first day was the Earth and to her was entrusted the labor of the second day. And on this second day, the sound of birth was heard again as the Earth divided and became the Vagina Primera. And out of this primeval vagina, in a great issue of blood, came the ovum of life, which rose up into the air and hovered over the Earth and guarded it and this was the Moon. And the blood surged out of the center of the Earth, out of the center of the Vagina Primera and it formed the oceans and the rivers and the Moon caused the oceans and the rivers to ebb and to flow. And still the blood poured forth and the Earth was nourished and her body rose up and her thighs became the mountains and her belly formed the valleys and from her breasts issued the white milk of light which illuminated and nourished all that she had created on the second day.

And on the third and final day, the Earth became *Gaea*.* Emerged from the Primal Vagina, she was the mother of all living things. Plants sprang up from her body and living creatures crawled out of her oceans and her tresses spread out across the Earth and became the trees and the grasses, the flowers and the fruit. And when all this was done, one last wail sounded in the Universe as Gaea gave birth to Woman.

And Woman gave birth to the human race in pain and in struggle and she accepted it in joy for she knew that all life and all growth brings pain. And Woman brought forth the human race and female and male she birthed them.

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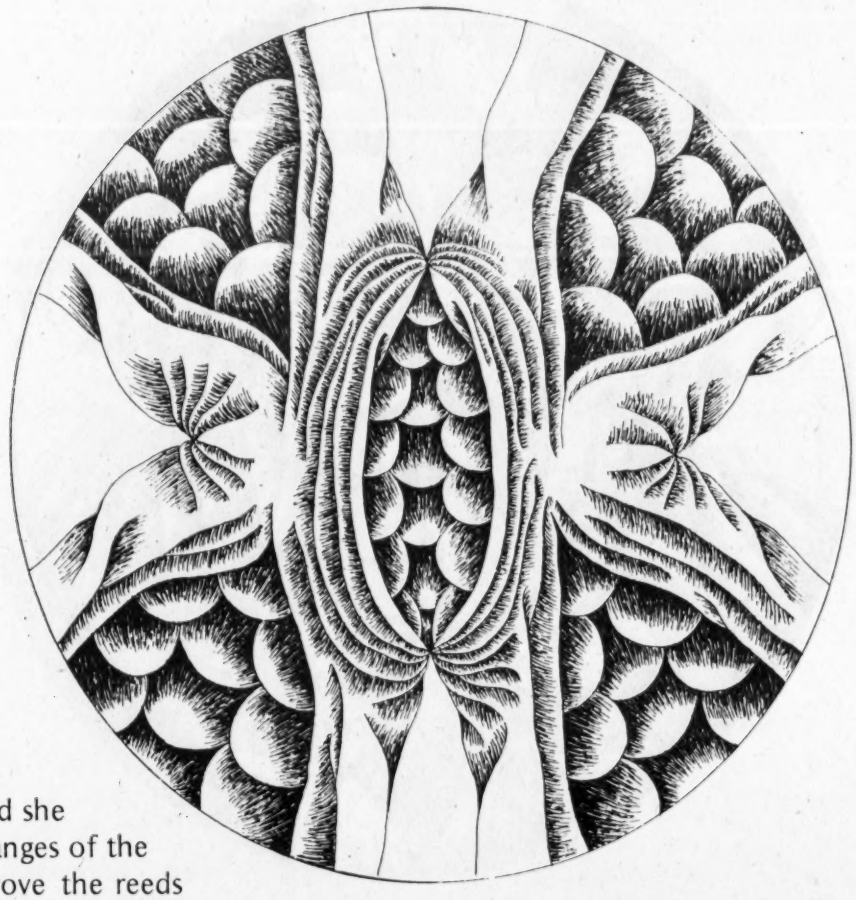
*All italicized names represent plates in the Dinner Party Exhibition and line drawings in the book.

In the beginning, Man was Woman's son and her lover, her help-mate and her companion. Together they lived in harmony and in innocence and together they walked in the cool of the evening and together they discovered the sound of their voices and they sang together and they laughed together and they felt the litheness of their bodies and they ran together over the Earth and together they tasted the sweet fruit of the trees and together they lay in the warmth of the sun.

And like a miracle, again and again, Woman's body swelled and strained and labored to create life. And Woman's brother Man stood before her in awe. He watched her body expand and open and give birth. He saw her breasts abound with sweet milk. And he entered her body in trembling and drank from her breasts in thanks and in the fullness of her flesh he understood the holiness of life. She was the Goddess of the Earth and the Goddess of the Moon. She was Woman as Fecund, Woman as Womb and Breasts and her abundance caused the world to flourish. She was worshipped as the *Fertile Goddess* and her image was carved out of rocks, fashioned out of clay and inscribed upon the walls of caves.

And as Woman brought forth the human race, so she brought forth human civilization. As she nourished her children with her milk, so she nourished the soil with her blood. Watering the Earth with the juice from her womb, she made the plants and the grain spring up from the ground. She made friends with the animals and tamed them and made them gentle. She transformed the clay of the river into vessels and



formed
the raw earth
into dwellings for her
family. It was she who
first kindled the fire and she
who first noted the changes of the
seasons and she who wove the reeds
into baskets and she who carved the first
flute and made soft sounds fly into the air. She made the first tools and she was the first healer. She was the first teller of tales and the first singer of songs and the first maker of images. And all the richness of her body and all the sweetness of her spirit and all the plenty she had created, she shared with her brother, Man. And everywhere there was peace and the feminine was sacred. . . .

And the daughters went forth from Eden. Everywhere they went they created and nourished and transformed life. Their brother travelled with them, helping them cultivate the soil, build the cities, and raise the many children that the daughters bore. And together they established shrines to the Great Goddess, whom they called by many names and praised in many languages as the Giver and Taker of Life, whose power was infinite. And the sisters and the brothers worshipped at Her altars to remind themselves of the sacred knowledge that had been imparted to women.

Some of the sons of Woman grew restless for they began to envy women's power. "Are we only meant to be women's helpers?" they grumbled among themselves. "Why do we help *you*?" the men asked their sisters. "We possess the sacred knowledge," their sisters replied. "Why is it given to you to have this knowledge and to bring forth life? Are not our bodies as holy as yours?" demanded the men. "Your bodies are different from ours," said the sisters. But the grumbling of the men grew louder and their dissatisfaction increased. "If it is the difference in our bodies that allows women to create life and to possess knowledge that we do not have, let us make our bodies the same as theirs," said the men among themselves. So they took sharp stones and cut into their flesh and their blood spilled out upon the Earth. But when no life sprang from their bodies, the men grew angry. "If we cannot bring forth life, we shall take life," they cried.

And they went out from their homes and they took a lamb from their sisters' flock and they laid hold of it and they slaughtered it. And they drank its blood and claimed that it was the strength of Woman they ingested and they ate its flesh and claimed that it was the power of Woman they possessed. But the men grew grew frightened by the arrogance of their deed. "We must go to the women," they said, "and confess that we have selfishly taken life." When the women heard what the men had done, they began to wail and the wail became a moan and the moan became a cry of mourning. The women lamented the loss of one of life's holy creatures and they grieved that the men had violated the sacred knowledge by taking upon themselves the power of Death.

The women pleaded with the men to repent and demanded that they beg forgiveness from their Goddess *Ishtar*. Although the men appeared ashamed of their deed, they said nothing. But they looked so remorseful that the women took pity upon them and comforted them. Taking the men's sin upon themselves, the women appealed to the Goddess to forgive their brothers saying that they did not know what they had done. The men were thankful and greatly relieved that they were not to be punished for their transgression and they promised their sisters that they would not kill again. The women were comforted and hoped that Ishtar would restore the balance of life on the earth. For a time, the men

Goddess
from the women,
for they loved their sisters and needed them, too.

kept their promise and it seemed that the Goddess had been appeased, for the world grew ever more abundant. The harvests were fuller, the fruit sweeter, the sounds of the flutes more melodious.

And everywhere women ruled in the many names of the Mother Goddess. Their realms prospered, their cities flourished and their influence increased. Yet once more some of the men became resentful. As their envy grew, they again began to grumble among themselves. They had tried to forget the day they learned that they could take the power of death away from Ishtar and make it their own. Though they had promised that they would keep the covenant of the sacred knowledge, soon they were saying to each other, "It is the sacred knowledge that women possess that makes their power great and our power small. If our sisters did not possess this knowledge, we would not have been driven to do what we did. Now, we have been punished by Ishtar. She has made the women stronger and mightier than ever. Ishtar does not love us. Why should we obey her?"

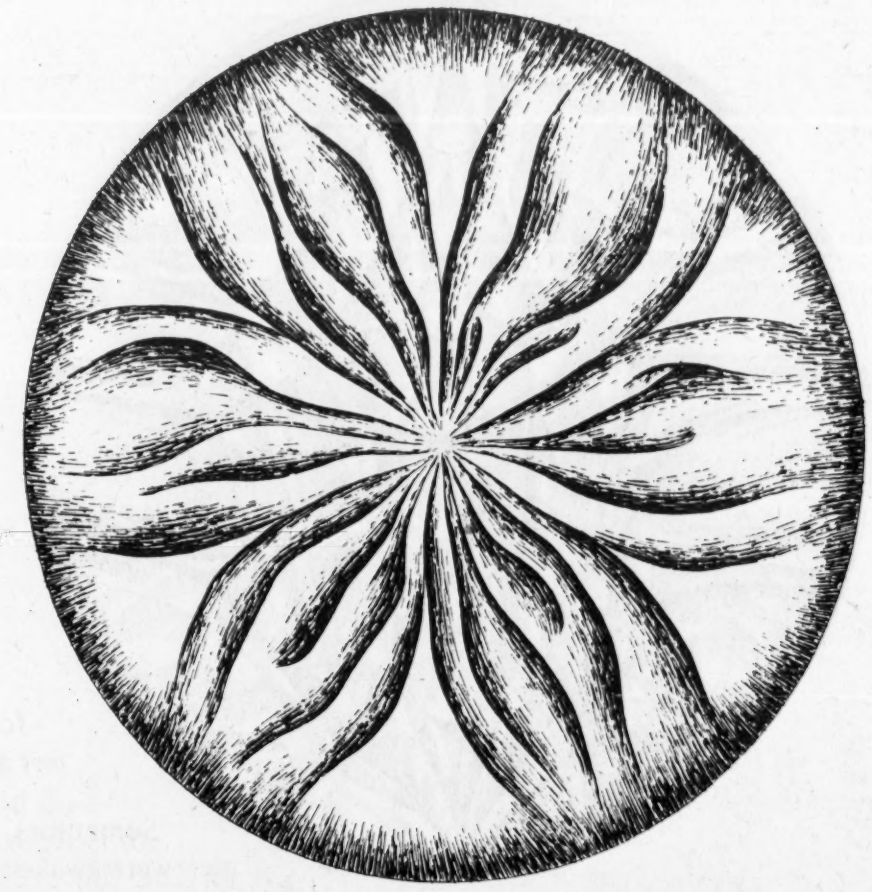
And the men again stole out into the night and took a newborn lamb and killed it and drank its blood and ate its flesh. And they cried, "If the women claim the power of life, we shall claim the power over life. And we shall have our own Mother Goddess and her name will be *Kali*. She will embody the dark and uncontrolled forces of the Universe which we, through our strength, shall tame. For is not the taking of life more important than the giving of life? The taking of life is an act of will while the giving of life is only a natural process. Thus, Kali is greater than Ishtar. If we serve Her well, She will reward us by increasing our power." But the men hid their new

Sometimes, in the night, the women were awakened by the bleating of the lambs and the roaring of the lions and they shuddered in terror of the unknown forces that were rising. But they shut out the memory of these sounds for they did not wish to see the dark face of life. And for three more years there was plenty.

Then, one night, the women of the fertile crescent dreamed that they were standing by a great river. The water was fresh and cool, the day was hot. Joyfully, the women plunged into the river. As they swam, the clear water thickened and became murky. Its sparkling green color faded and grayed, then turned a dark red. The women scrambled out of the current, their bodies coated with large clots of blood. On the following night, the women had a second dream in which they saw a field of flowers, lush and full. In the sky above them there appeared dark, ominous clouds and amid thunder and lightning, the rain poured down. It did not cease for three full days. When the storm finally ended, all of the flowers were drowned, their roots upturned by the force of the torrent. But though the Earth had been deluged with water, all was barren. In the morning when the women awoke, there was famine upon their land.

Realizing that this famine was the punishment for their brothers' actions, the women called a convocation of all the women of all the lands. They assembled and discussed the men's violation of the Goddess' law that life should never be taken needlessly and they debated what to do about the men's rebellion. Some women refused to believe that female power could be overthrown; some women thought they should try to appease the men. But some women were determined to fight to preserve the matriarchy. . . .

They went out of the temple where they were gathered and they armed themselves. And there ensued upon



the Earth a battle as had never before been seen. All that had been merged in the giving and taking that was the Universe were rendered separate. Life and death, good and evil, nature and will, the light and the darkness waged war against each other in the earthly forms of the sisters and the brothers who had once lived together in peace and harmony.

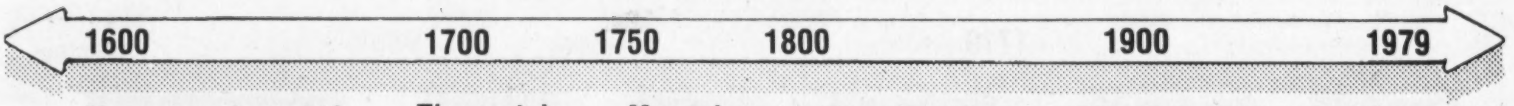
They came together at the very center of the Earth. The women carried the double axe in their right hands and in their left they carried a shield inscribed with the triangular sign of the Goddess. Moving out into a crescent, they swooped down upon their brothers. The sight of them filled the men with awe and pity for they knew that this day they would strike down their own mothers, their own sisters and their own daughters.

They met arm to arm, axe to sword, shield against shield. The women fought valiantly and one by one the men fell before them until the field was theirs. But when the women saw what they had done, they could not go on. They felt grieved by the sight of the blood and sickened by the sounds of the pain they had inflicted. Victory was theirs, but only if they forsook forever the sacred knowledge – and this they could not do. That which caused them to cherish life doomed them to defeat. Their strong arms trembled, their hands lost their grasp and their weapons fell down upon the ground. Whereupon, from the crest of the hill, there rose up an army of men and as one body they descended upon the women and they slew them. And when the battle was done and the Earth was strewn with the bodies of her daughters, their Mother sobbed until Her tears filled the oceans and they overflowed, covering the Earth in a great flood of grief.

And from the deep, in a vapor, there rose up from the water stained red by the blood of the daughters, the white light of the sacred knowledge. From the center of this heavenly brightness was heard the anguished voice of the Great Goddess: "O, children of my flesh, formed in my own image, we are vanquished. All that has been yours will be taken from you; and, like a child from the mother's womb who forgets from whence it came, so shall your brothers deny you. Drop by drop, like liquid trickling from a small crack in a large jar, your power will be drained away until the memory of bygone days will be nothing but dreams and fairy-tales and poets' musings.

"No longer will you gaze at the world you have birthed and nourished and made fertile and feel pride that you have created it, for Woman's rule will end. By degrees, your brothers will take possession of the Earth and they will build a great civilization. But, in order to do this, they will bring the rule of force to the world and humble you and exalt themselves. Deep in their hearts they will be troubled by the sin they committed when they stained their hands with your blood and they will fear that they can remain strong only if you are made weak.

"Slowly, your brothers will recreate the world in their own image and likeness, and the power of your Goddess will be usurped by a multitude of Gods. Men's gods and men's laws and men's authority will not take hold all at once. It will take centuries before this transformation is complete. As men gain mastery over the planet, feminine wisdom will be banished and the sacred knowledge of life's natural rhythms denied. But one day your wisdom will be needed again, and when that day comes you will be redeemed and your value restored. •



⇦ 1450
(3 inches to the left of this page)
Invention of printing.

A History of Magazines on a Timeline

by Art Kleiner

This is a series of spotlights on the history of American magazines and their personalities. I've always felt magazines have more personality than either books or newspapers; books are one-shot affairs, and newspapers are stuck with standardized formats and the rush to get out by the morning deadline. But every magazine, in its blend of graphic and writing style, reflects the taste and character of a community of people who create and read it. Taken as a blurred whole, it seems to me that magazines reflect the personality of our culture.

Academic magazine historians seem to agree that behind every successful publication stands a unique, strong-willed individual, who stamped it with his/her distinct personality, which a public happened to pick up on. These days, colorful types like Larry Flynt and Helen Gurley Brown notwithstanding, that doesn't seem to be so true. Over the past 40 years the slick magazine style has been refined into a corporate formula for grabbing readers, for enticing them to look at everything (especially the ads) and for allowing them to forget everything once they've read it.

As they compete for readers' attention, even the nobler-purposed magazines fall into this style. How much can you trust an alternative point of view like that of **Mother Jones** or **High Times** if the form of its presentation (paper slickness, page size, style of illustration, relationship of ads to text, and general design) is not very different as a whole from **Playboy**, **People**, or **House Beautiful**?

Magazines didn't look like that until after World War II. The first magazines, in the 1700s, looked like . . . books.

Box 428, Sausalito, CA 94965

NUMB. LXXVIII.

The SPECTATOR.

Cum Talis fis, Utinam noster esses!

Wednesday, May 30. 1711.

THE following Letters are so pleasant, that I doubt not but the Reader will be as much diverted with them as I was. I have nothing to do in this Day's Entertainment, but taking the Sentence from the End of the *Cambridge* Letter and placing it at the Front of my Paper; to shew the Author I wish him my Companion with as much Earnestness as he invites me to be his.

SIR,

'I Send you the inclosed, to be inserted (if you 'think them worthy of it) in your SPECTATORS; in which (a surprizing a Genius appears, that it is no Wonder if all Mankind endeavours to get somewhat into a Paper which will always live.

'As to the *Cambridge* Affair, the Humour was really carried on in the Way I describe it. However, you have a full Commission to put out or in, and to do whatever you think fit with it. I have already had the Satisfaction of seeing you take that Liberty with some things I have before sent you.

'Go on, Sir, and prosper. You have the best Wishes o.

Sir,

Your very affectionate and obliged humble Servant.

Mr. SPECTATOR, *Cambridge.*

'YOU well know it is of great Consequence 'to clear Titles, and it is of Importance 'that it be done in the proper Season: On which 'Account this is to assure you, that the CLUB OF 'UGLY FACES was instituted originally at *CAMBRIDGE* in the merry Reign of K---g *Charles* II. 'As in great Bodies of Men it is not difficult to 'find Members enow for such a Club, so (I remember) it was then fear'd, upon their Intention of 'dining together, that the Hall belonging to *CLARE HALL*, (the ugliest *then* in the Town, 'tho' *now* the neatest) would not be large enough 'HANDSOMELY to hold the Company. Invitations 'were made to great Numbers, but very few ac'cepted them without much Difficulty. One 'pleaded, that being at *London* in a Bookseller's 'Shop, a Lady going by with a great Belly long'd 'to kiss him. He had certainly been excus'd, but 'that Evidence appear'd, That indeed one in *London* did pretend She long'd to kiss him, but that it 'was only a *Pickpocket*, who during his kissing her 'stole away all his Money. ANOTHER would have 'got off by a Dimple in his Chin; but it was 'prov'd upon him, that he had by coming into a 'Room made a Woman miscarry, and frighten'd 'two Children into Fits. A THIRD alledg'd 'That he was taken by a Lady for another Gen'tleman, who was one of the handsomest in the 'University: But upon Enquiry it was found, 'That the Lady had actually lo' one Eye, and the 'other was very much upon the Decline. A FOURTH 'produc'd Letters out o' the Country in his Vindi'cation, in which a Gentleman offer'd him his 'Daughter, who had lately fall'n in love with him, 'with a good Fortune: But it was made appear 'that the young Lady was amorous, and had like 'to have run away with her Father's Coachman: 'so that 'twas suppos'd, that her Pretence of fal'ling in love with him was only in order to be w 'married. It was pleasant to hear the several 'cuses which were made, insomuch that some 'as much Interest to be excus'd as they would 'serving Sheriff; however, at last the Soc 'form'd, and proper Officers were appoint 'the Day was fix'd for the Entertainment 'in *Vernon Season*. A pleasant *Fellow* 'lodge (commonly call'd CRAB fro 'and the only Man who did not 'was nominated for Chaplain 'wanting but some one to 'by way of PRESIDENT, 'Table; and there the B 'no Contention for Su 'made so great a No 'then at K---ngsbr 'merrily and gracio

Magazines began as genteel soapboxes from which literate men expounded their points of view, in essay or satire. Daniel Defoe started the first English magazine, **The Review**, during or just after his imprisonment for criticizing the Church of England. His purpose: a statesman or man of letters offers his comment, criticism and satire to influence public taste. The audience is composed of members of the same social scene that is the subject of most of the magazine's writing. Over the course of time readers come to depend on the regularity of its point of view.

Joseph Addison, a high-bred moralist and social critic, wrote for his friend Richard Steele's **Tatler**. When the **Tatler** folded Addison created **The Spectator**, the most famous of the early British journals. It looked just like newspapers of the time: a daily 8 x 12-1/2" one-page paper, printed on both sides. Tiny print, no illustrations, and maybe half a column of classified ads. It's considered a magazine because instead of news it printed comment. Each issue was written entirely by Addison or Steele; occasionally by a friend. The issue shown here was mostly devoted to a satire on vain-but-ugly London gentlemen. Addison introduced the short informal essay and the short fiction story to English literature in his magazine.

The Spectator lasted three years, but hundreds of others appeared to replace it. Colonial Americans established their magazines in the same style. Since Addison, prominent literary/art personalities use magazines as one of the most accessible vehicles of their point of view. The magazines they create are usually not popular, but can be influential.

1700s **1800s** **1900s**

Benjamin Franklin
General Magazine
1741

Thomas Paine
Pennsylvania Magazine
1775-6

Noah Webster
American Magazine
1787

Joseph Dennie
Nicholas Biddle
The Port Folio
1801-27

James Russell Lowell
The Atlantic Monthly
1850 and on

Margaret Fuller
Ralph W. Emerson
& H.D· Thoreau
The Dial
1886-7

Alfred Stieglitz
Camera Work
1903-17

Tristan Tzara
Dada
1917-20

H.L. Mencken
American Mercury
1924-33

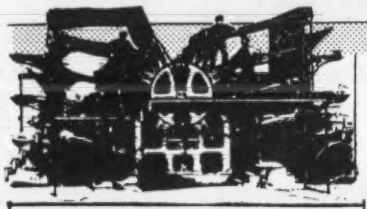
Henry Miller
Lawrence Durrell
Alfred Perles
& William Saroyan
The Booster
1937-8

William Butler Yeats
On the Boiler
1939

Andy Warhol
Interview
1969 and on

Layout and design are usually secondary to literary-minded editors. But designers have their own soapboxes, such as Herbert Read's **Typographica** (content of writing usually limited to design and typography) or Push Pin Studio's **Push Pin Graphic** (content is almost non-existent.) Very few of the soapbox magazines pushed a point of view that combined writing and design; one example is the Dadaist magazines in Europe in the 20s.

1880



RICHARD M. HOE'S, TEN CYLINDER, ROTARY POWER-PRESS, PRODUCES 20,000 IMPRESSIONS PER HOUR.

Until the 1880s, only the upper classes read magazines. They were small softcover books, carrying stories that appealed to a classically-educated, elite readership that identified with Europe. The poorfolk read newspapers and weekly tabloids. Magazines were expensive, partly because printing technology limited even the most popular to a run of 100,000 copies; it simply took too long to push any more paper through a press.

Plus, until Congress created second-class mail in 1879, the American Post Office only carried magazines for short distances, at high cost.

The R. Hoe and Co. rotary printing press fed three rolls of paper through the press at once, and made possible printing runs of as many copies as publishers wanted. At the same time, some publishers were trying to appeal to the new publicly-educated, industrial-urban lower-middle-class by decreasing their prices. **McClure's** magazine at only 15¢ was phenomenally successful. So **Munsey's** lowered its price from 25¢ to 10¢. Suddenly every major magazine cut its prices and upped its circulation. (The more copies printed, the cheaper each one costs to produce.) The average citizen had always been interested in literature and comment, but it had been too expensive before. The powerful and fashionable lost their control of the arts to public taste. Magazines ceased to be soapboxes, and became mass media instead.

Magazine Circulation Growth In Two Years

McClures
1893 – 8,000 circulation
1895 – 250,000 circulation

Munseys
1893 – 40,000 circulation
1895 – 500,000 circulation

S.S. McClure and Frank Munsey both grew up poor but McClure was an idealist with a seemingly heartfelt desire to reach many people. Munsey was an opportunist who wanted to make big money in the magazine trade (and did). **McClure's** provided the earliest muckraking stories (Ida Tarbell on Standard Oil, for instance) and helped develop documentary photography as an editorial device. **Munsey's** specialized in sentiment and Western fiction, and was the first magazine to print nudes (captioned as 'art') in America.

Within five years after its birth, **Munsey's** lowest-common-denominator approach had brought it the largest circulation of any magazine in the world. Most of it still looked like a book. There were no headlines or continued stories, and pictures were confined within columns. In the 1800s reading habits were different. You started at the very first page and read straight through, column by column, until the end. People didn't flip through or skim, and magazine layouts didn't encourage them to.

But ever-increasing use of illustration and photography began to change these habits.

"A Fair Beginner"

MUNSEY'S MAGAZINE.

VOL. XV. MAY, 1896. No. 2.

THE WORLD AWHEEL.

THE MARVELOUSLY RAPID GROWTH OF THE BICYCLE'S POPULARITY AND INFLUENCE—ITS RANK AS ONE OF THE INVENTIONS OF THE CENTURY, ITS IMPORTANCE AS A FACTOR IN PRESENT DAY CIVILIZATION, AND ITS DEVELOPMENT OF A COLOSSAL MANUFACTURING INDUSTRY—HOW THE WHEEL BEGAN, AND THE MEN WHO HAVE MADE IT WHAT IT IS.

THE STORY OF THE BICYCLE.

An invention to which France, England, and America have contributed—its development since the beginning of the nineteenth century.

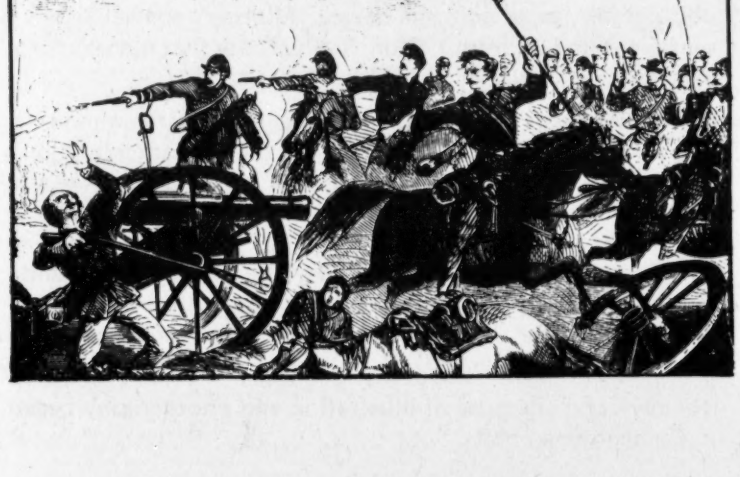
A FEW years ago, when the "safety" first made its appearance, the most enthusiastic devotee of the wheel would scarcely have dared to claim for it a place among the great inventions of the age. Today, in reckoning the achievements of the nineteenth century, to such epoch making discoveries as the railroad, the steamship, the telegraph, and the telephone, we can hardly refuse to add, as the latest item on the list, the bicycle.

The beginnings of the bicycle were obscure, and the early steps in its development were slow. Until a decade ago it was only a curious plaything, which attracted little public attention, and gave small promise of general benefit. Then, suddenly, with the introduction of the wheel of modern pattern, the world at large began to learn its possibilities. The growth of wheeling became rapid, dramatic, almost sensational. Old and young, rich and poor, men and women, boys and girls—all caught the "bicycle fever." The manufacture of the slender steel machine has become a colossal industry; its popularity is an important factor in

"The Lady and the Tiger."
Drawn by C. H. Sykes.

1665 1865

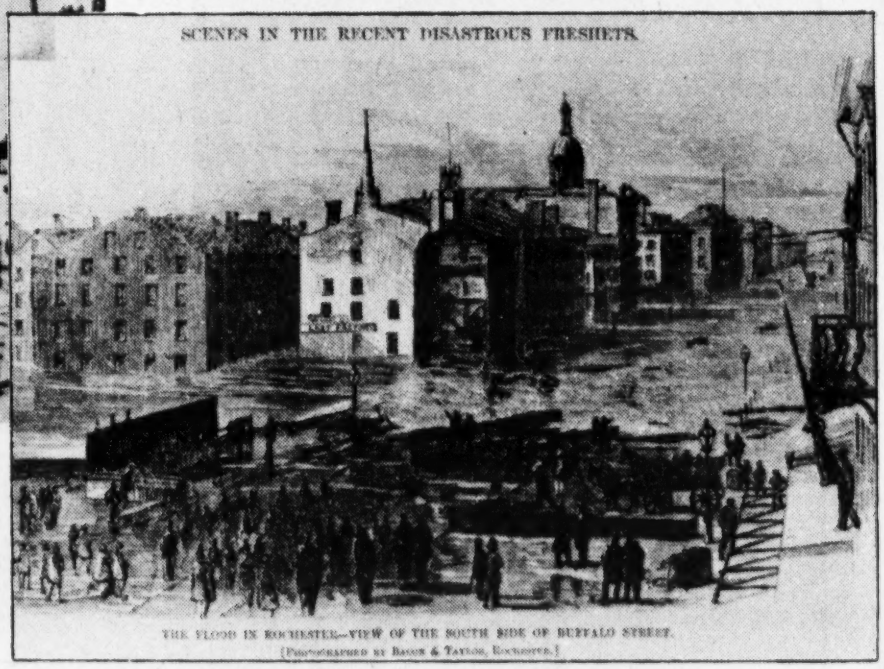
Pictures are attractive. Even the earliest printers put individually painted illustrations into their books, like the hand-lettered medieval manuscripts. Then printers used wood blocks, etched out by artists and fit into type racks. A printer would keep a set of blocks, and might use the same 'walled city' image to represent many different towns.



In the 1800s, illustrations were engraved on copper and wood, using a number of sophisticated techniques for simulating grey tones with only black ink. Most illustrations were etched with acid or by hand from pictures drawn onto metal or wood. The process was tedious but produced elaborately textured images, more beautiful than you'd expect from the few that are reproduced today.

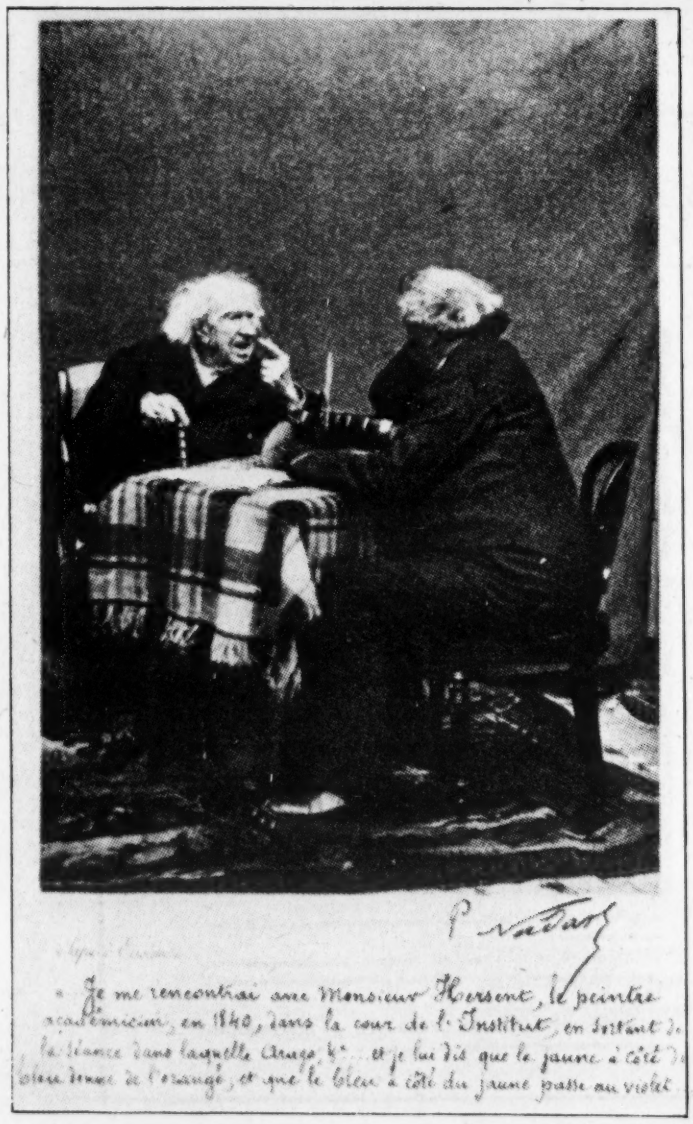
Sketch artists were sent to cover events like news photographers are now. They sent back romanticized drawings; this dramatic and noble Civil War battle was probably gruesome and unpicturesque in reality. A good illustrated magazine like **Harper's Monthly** or **Leslie's** carried lots of engravings, flanked by long stories in large columns of small type. It took hours to read a magazine.

Early photographs had to be copied by hand, like this flood scene. Magazines hired photographers to shoot pictures and engravers to etch them. Every photo-technologist sought a method of printing pages directly from photographs. Some succeeded, but their methods couldn't combine photos easily with type. These methods included variations of lithography; they produced high-quality reproduction plates which were pasted into books and fine art magazines.



The first halftone: "A Scene in Shanty-Town." The tones of a photo were filtered through a screen of black-and-white lines or dots, which gave the illusion of shades of grey. Photographs, more 'realistic' than drawings, could now be reproduced on a page with type, and immediately dominated the news. But the halftone process itself altered the feeling of the original photographs; most people did not realize until later that the photo and printing processes distorted reality as much as the old sketch artists.

Photographers and editors had to devise precedents for using photography and words together in print. The first photo-interview, between French photographer Paul Nadar and 100-year-old physicist M.E.Chevreul, set a precedent for photo-captions later. The muckraking photographs of Jacob Riis in **McClure's** influenced later social-realism documents of the thirties. The combination of photos, evolving styles of journalism, and the new technology of offset printing and color process created a new language of the printed page, a language which made high-power advertising layouts possible.



« Je me rencontrai avec Monsieur Hersent, le peintre académicien, en 1840, dans la cour de l'Institut, en sortant de la séance dans laquelle Arago, &c... et je lui dis que le jaune à côté du bleu tirait sur l'orangé, et que le bleu à côté du jaune passait au violet

Advertising EXPLOSION

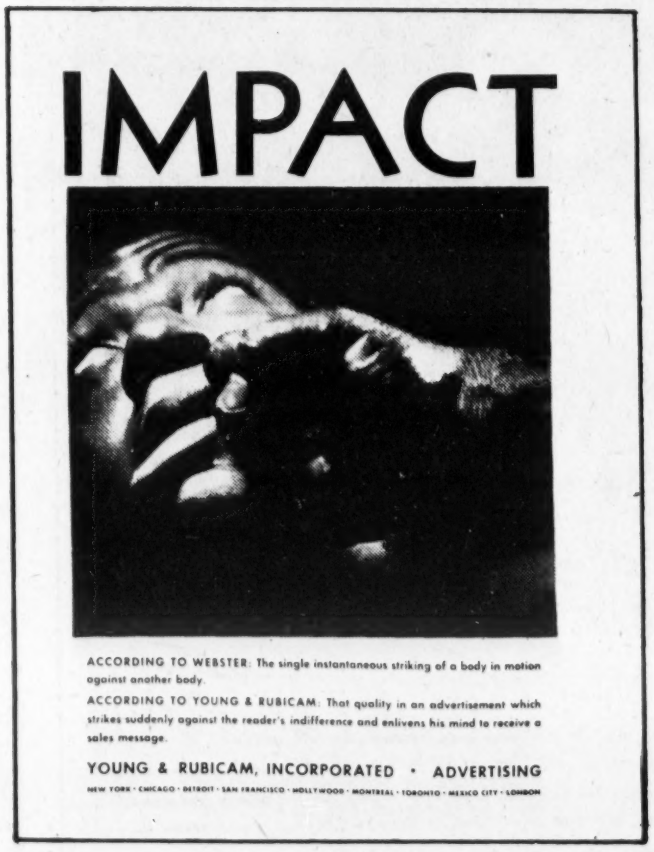
Suddenly magazines were very attractive to advertisers. Before the turn of the century, even the most popular magazines carried only a small amount of what we call classified advertising and almost no large display ads. But after some resistance, the last of which died out in the 30s, mass market magazines all came to depend on advertising to survive. This changed magazines completely. They no longer sold people information and entertainment; their main purpose was to provide advertisers with a steady, returning audience.

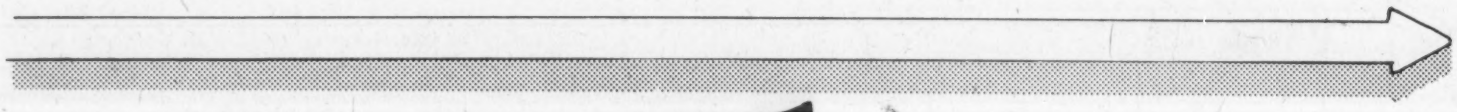
Ads made it possible to sell magazines below production cost, which made it possible to lower their price still more, which increased their audience, which made them even more useful to advertisers.

Advertisers discovered that with full pages and the new language of design, there was room for pictures, slogans, headlines and the psychic symbols of soft sell. Graphic design came to mean sophisticated visual means of developing impact.

Ad agencies started in 1890. They developed research and circulation boosting: the subscription discount offers, the efforts to survey a magazine readership to document their demographics for potential advertisers. Because one advertisement plate would be used for many magazines, page sizes became standard, and since then magazines with unusual page sizes have had difficulty surviving. Because copy pages had to compete with ads for readers' attention, editorial art departments began to use advertising-type graphics.

The most successful magazine designers were often former ad agency artists. They mimicked the slogans that were early advertising's most successful feature by playing up article headlines and subheads in bold lettering. They introduced full-color editorial spreads when advertisers insisted on full-color advertising. They reshaped the formats to bring readers closer to ads. Not until advertising did stories continue at the back of a magazine.





sing

D E D

This is what makes a magazine good for advertising:
A clearly defined, guaranteed readership of 500,000 or more, hooked by a stable editorial stance.
The right balance between amount of text and picture. Too much text is boring, but readers flip through and toss aside pictures-only too quickly. Advertisers pressured Henry Luce to add articles and essays to **Life** for this reason.
Lots of 'grey matter': plain columns of type with no pictures or headline, run next to ads to make them stand out. Some magazine historians credit part of the **New Yorker**'s success to this format.

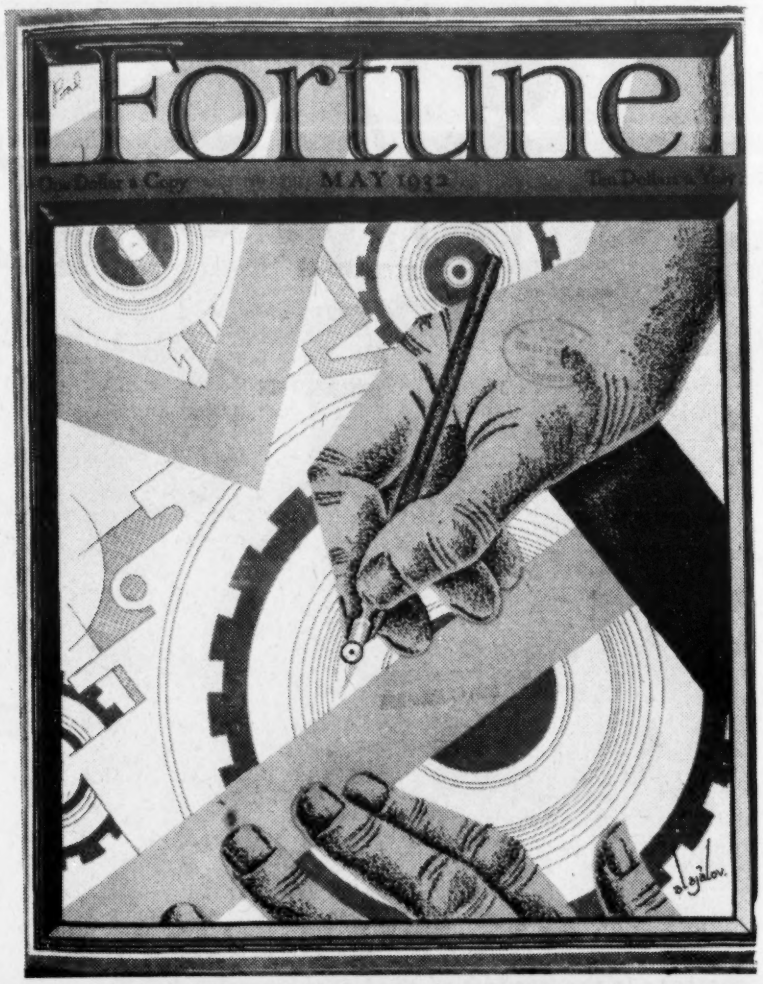
While few magazines changed their editorial viewpoint directly because of advertising pressure, there were subtle changes in content. In the late forties, the leftist magazine **Ken** lost momentum when advertisers threatened to withdraw not only from **Ken** but also from parent magazine **Esquire**.

An editorial inside this recent issue backed up their cover claim by citing a **Columbia Journalism Review** survey of magazines which carry cigarette ads. None have run a comprehensive anti-smoking article in the last seven years. Their advertising director told me **Mother Jones** has very few nationally-placed consumer ads because major advertisers stick to magazines with over 500,000 circulation. She said they haven't had any automobile ads since their Pinto expose.

"A magazine for would-be writers, entitled **Plots That Sell to Top Paying Magazines** (1953), offered a breakdown of magazine short story themes. Specific magazines, it said, accepted only specific themes and published these over and over again with only slight variations. To save time in determining these themes, it advised readers to skip the stories and look at the ads: 'The key is in the ads.'"

Edmund Carpenter,
Oh What a Blow That Phantom Gave Me

The best and probably most influential of American magazines was **Fortune** in the 1930s. **Fortune** was created by Henry Luce, who with a partner had created **Time** in the 20s, and who started the corporation that would later produce **Life**, **Sports Illustrated**, **Money** and **People**. **Time** was the original glib newsmagazine, and **Life** was designed by a series of consultants seeking the proper formula, but **Fortune** in the 30s was a work of art with content that happened to be the affairs of business. Luce was determined to create a magazine of quality for the people he called the 'aristocracy of our business civilization,' and to do so he gathered the most capable and highly respected artists, writers and photographers — among them Dwight MacDonald, Rockwell Kent, Archibald MacLeish, Margaret Bourke-White, and Thomas Cleland, who designed the original **Fortune** format. Several of the renowned **Life** photographers got their start here.



Luce developed his magazine out of the business pages of **Time.** Although later he would become known for his conservative politics, in the 30s his magazine had an investigative flair and a liberal, if not Communist, reputation. Corporations were profiled as human, not monolithic, organizations.

In covering the industrial world, **Fortune**'s photographers and designers created an almost hand-crafted looking magazine. It was one of the first to print high-quality color illustrations; and the first to try to tell a story primarily with photographs, as **Life** would do later. It was printed on thick, matte paper with expensive inks. It enclosed its photographs in various ruled frames, and printed them in very fine screen so that they were almost as detailed and sharp as the original prints. The confidence of Mr. Luce and his editors that they were creating something of quality is infused in every page of the old **Fortune**.

machines belong to the same epoch.

And even today the effect on the industry, outside the field of large-scale operations, is relatively unimportant. Few machines are used in house building. Masonry, roofing, carpentry, plastering, painting, and tile-setting are still hand operations. Plumbing and electrical work are largely manual and the labor costs on the job which, in a modern automobile, may amount to no more than 12 or 15 per cent of the total will, in a house, amount to 25 per cent or 50.

The consequences, from the labor point of view, are two:

FIRST, the old established crafts with their guild beginnings and traditional proprietorship of the secrets of the trade have not been broken up in the construction industry as they have been elsewhere. The builder, originally a "master mason" combining the functions of architect, builder, and clerk of the works (the word "architect" does not appear until 1563) still stands in approximately his old relation to his workmen, and the old possessive attitude of the craft toward the job it works at still remains. The building-trades workman is migratory. He is a "journeyman"—journeyman carpenter, journeyman bricklayer, journeyman plasterer. Where the ordinary industrial workman is dependent on his factory and tied down to the district—steel district, cotton district, coal district—where his trade may be practiced, the carpenter may go anywhere. He may drift down the Atlantic Coast with a building boom, using his whip-steel saw on Florida cypress and Georgia pine, turn west into Louisiana and Mississippi when the Florida hotels collapse into their mortgagees' hands, bang nails into cheap spruce studding in some Texas town, ride the dead-ends north to St. Louis with his weathered tools rolled in his carpenter's apron under his arm, knock together the cement-stained boards for a new form in St. Paul, bum his way out West on the empty trucks, pick up a three-months' job in Billings, and end up on the Coast with a house of his own and a foreman's pay, boxing fish in a cannery. His equipment is his knowledge and his tools—the plasterer's hawk and trowel and float and darby, the sheet metal worker's tongs and seamer and wrench and shears, the painter's brushes and duster and putty knife and scaffold, the plumber's joint runner and chisel and compass and brace, the bricklayer's brick trowel and buttering trowel and pointing trowel and his hammer. Once a boy has passed his apprenticeship and bought his tools he can work wherever work is available. And work may be available anywhere. Even in times of general depression local building booms will start up and flourish and die away on Long Island or in Michigan. And the masons and the carpenters will gather and disperse.

Secondly, the recent partial introduction of machinery in building and the example of mechanization in other industries has emphasized the solidarity of the building crafts and aggravated the worker's proprietary attitude. In 1904 the Bricklayers' Union somewhat prematurely announced that "the success and prosperity of our calling is due to the nonexistence of competitive machinery." And the opposition of the unions to mechanical innovations such as the paint-spraying machine, etc., constitutes a chapter of labor history of the greatest significance.

IN OTHER words the strength of the unions in the industry is due (1) to the fact that the old identity of the crafts remains and (2) to the fact that that identity is now threatened. Nothing could be more misguided than the opinion that the building-trades unions are radical or revolutionary. On the contrary they are conservative and obstructive. The state of mind of their members is directly comparable to the state of mind of the businessman whose business is threatened. As Professor Haber puts it in his excellent *Industrial Relations in the Building Industry* (Harvard University Press, 1930) "... the building-trades worker views his organization as a business institution paying dividends in the form of higher wages, shorter hours, better working conditions and greater control over those factors which endanger the security of the job ... the practices and policies enforced are not unlike those enforced by business men generally."

Not of such is the kingdom of radical propaganda. The carpenter's attitude is the attitude of Joe Williams in Dos Passos' *1919*, who replied to the suggestion that he join the I. W. W. and carry a red card and be a class-conscious worker: "... that stuff was only for foreigners, but if somebody started a white man's party to fight the profiteers ..."

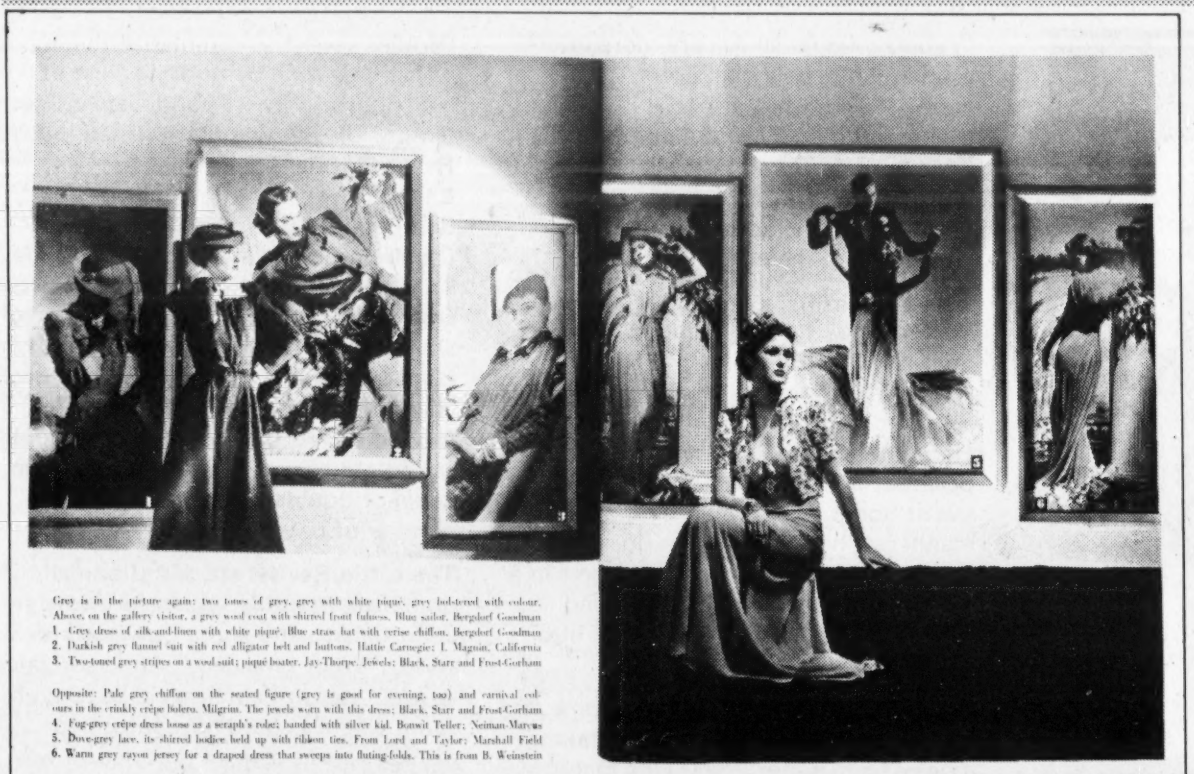
The Jurisdictional Strike

Once that attitude is understood the tactics and policies of the unions became, if no less objectionable from the employer's point of view, at least more comprehensible. The jurisdictional strike is a perfect example. It has been estimated that 95 per cent of the strikes in the industry have been caused by disputes between unions as to the jurisdiction of a particular job. And the waste from that source alone has been incalculable. But the reason for such strikes should be clear enough. With advances in technology and the substitution of one material for another, a union finds its old work cut down and the new work claimed by a competing group. Since the competing group may be in the same position the dispute becomes insoluble by peaceful means, and no alternative but the strike is left.

So, for example, the powerful United Brotherhood of Carpenters & Joiners, faced with the introduction of iron and steel frames in place of wooden frames, iron and stone staircases in place of wooden staircases, and tile and metal wainscoting in place of wooden wainscoting, found itself fighting for its life against the masons, the plasterers, the steel and iron workers, and the marble setters. The policy of the Brotherhood was to claim a vested interest in work formerly done by carpenters even though the material used was no longer wood. And the consequence was a series of jurisdictional disputes one of which, that with the Sheet Metal Workers, lasted twenty years and was only won by the Brotherhood because the Brotherhood was able to fight the entire building-trades labor movement. The Building Trades Department of the American Federation of

[Continued on page 135]

By the late forties quality was too expensive, and the idea of businessmen as an elite social force had changed somehow. **Fortune**'s publisher and editors remodeled the magazine in 1948. They made its format more conventional (its paper had already become glossy) and limited the content to what is more normally considered business reporting. **Fortune** began to look like every other magazine.



Grey is in the picture again: two tones of grey, grey with white piqué, grey bolstered with colour. Above, on the gallery visitor, a grey wool coat with shirred front fulness. Blue sailor. Bergdorf Goodman
1. Grey dress of silk-and-linen with white piqué. Blue straw hat with cerise chiffon. Bergdorf Goodman
2. Darkish grey flannel suit with red alligator belt and buttons. Hattie Carnegie; I. Magnin, California
3. Two-toned grey stripes on a wool suit; piqué boater. Jay-Thorpe. Jewels: Black, Starr and Frost-Gotham

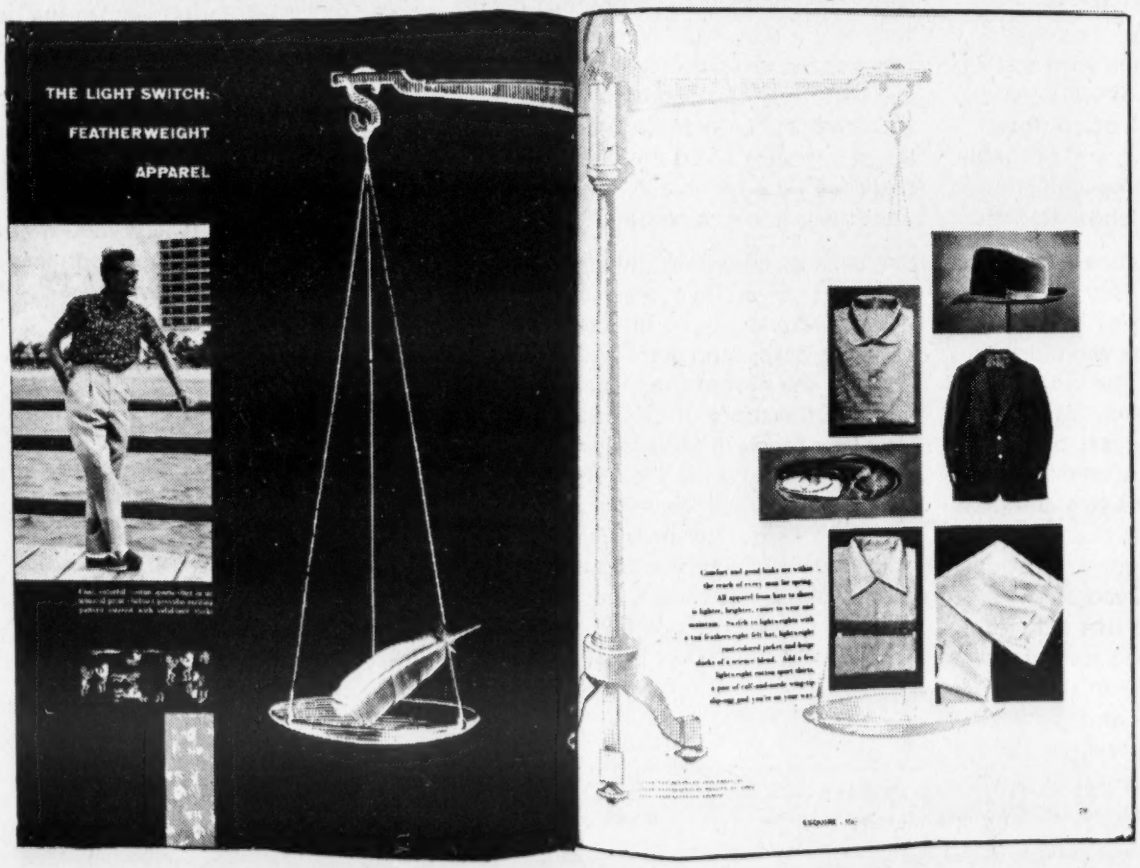
Opposite: Pale grey chiffon on the seated figure (grey is good for evening, too) and carnival colours in the crinkly crêpe bolero. Milgrim. The jewels worn with this dress: Black, Starr and Frost-Gotham
4. Fog-grey crêpe dress loose as a seraph's robe; banded with silver kid. Bonwit Teller; Neiman-Marcus
5. Dove-grey lace, its shirred bodice held up with ribbon ties. From Lord and Taylor; Marshall Field
6. Warm grey rayon jersey for a draped dress that sweeps into fluting-folds. This is from B. Weinstein

GALLERY OF GREYS

Vogue in the 30s

The slick look didn't crystallize until the late 40s/early 50s. Its roots were in the fashion magazines of the 20s, **Vanity Fair** and **Vogue**, where advertising and editorial art directors worked together on the new language of fashion photography/page display. Bauhaus designers, fleeing Nazi Germany in the 30s, joined American ad agencies and magazine staffs, where they introduced bleeds (photographs or art that extended to the edge of the page), and a new sense of page design that ignored traditional margins and bookish decorativeness in favor of a crisper immediacy. There weren't frames around the pictures any more; readers were sucked into the scene of each spread.

Influential art directors at **Esquire, Holiday, Playboy, Look** and **McCall's** refined the contemporary magazine style in the 50s. They used bigger pictures, experimented with headlines to get more informal effects, and jumped the gutter (ran pictures or headlines across the centerfold of a two-page spread.) By the sixties, the dominant slick style had been set: even their own trade papers, **Communication Arts** and **Print**, said that magazines were piling on the formulas of the fifties to out-flash their competitors. People flipped through magazines at newsstands and doctors' offices. New magazines survived only if they catered to narrow consumer groups: runners, for instance. The typical look was that of **Psychology Today.**



Esquire in the 50s

Of the half-dozen published photographs of Margaret C. Anderson (from her magazine, **The Little Review**, or her three autobiographies), the most arresting is a full-face passport snapshot. It shows a confident lady of forty-nine with thick, dark lipstick, a great tuft of white hair above her high forehead, a dried-flower corsage, a cocked eyebrow, and probably lots of perfume. She's staring with amused contempt at the passport photographer.

Other photos include a somber portrait taken by the dadaist Man Ray, but my favorite is a picture of Anderson at Cannes in 1927, just as she was closing down the **Little Review**. She looks greatly relieved that it's over. She has short, dark hair and blue eyes. She's leaning against a wall in a sleeveless black dress with a string of pearls stretching down to her belly, hugging herself, her head thrown back, laughing. I'm probably projecting what I've read onto the photograph, but she looks like a breathlessly energetic woman who has style but no money, who lives for what she calls inspired conversation and who is most proud that her passionate feelings about art, love and friendship are out of synch with the more mundane world around her.

"People who make Art are more interesting than people who don't," she wrote. "They have a special illumination about life; this illumination is the subject-matter of all inspired conversation; one might as well be dead as to live outside this radiance."

In 1914 these feelings made her want to start a magazine. She was 21, writing book reviews for an established Chicago journal, **The Continent**, and trying to escape from her family. They had followed her from Columbus, Indiana. Her mother was a high-strung Christian Scientist who wanted her daughter to live at home. Her father, a mild-mannered, hard-working businessman, had kept a wife and three daughters in a constant supply of new clothes and furniture for years, until he went into a sanitarium at age 50.

By that time Margaret had left home and was living alone in Chicago, still taking money from her mother. One night, lying awake, she decided her life was dull. "If I had a magazine," she said to herself, "I could spend my time filling it up with the best conversation the world has to offer." She decided to start one, fell immediately asleep, and woke up with the solid conviction that she was already an editor. All she had to do was get people to write for her and give her money.

With that spirit, she not only started the **Little Review**, but kept it running for 13 years, usually at the forefront of the latest controversial aesthetic movement, frequently with no income except a few subscriptions. She lived without furniture or in other peoples' houses. Sometimes she went without food or sold her clothes. She put off landlords, printers and creditors with aristocratic elan. When a landlord said she had written a bad check she replied, "I didn't tell you it was going to be good."

She became known in Chicago literary and political circles as a vividly beautiful woman who spoke, as she described it, in "gaps, gasps, and gestures." From Chicago she moved the magazine to tents on the shore of Lake Michigan; later to a ranch in Mill Valley, California, owned by the local sheriff; to the West Village in New York; and finally to Paris. Her only demanded possession was a Mason and Hamlin piano. She could usually get the manufacturer to lend her one for free wherever she was staying.

Perhaps easiest to summarize the impact of her magazine by quoting a list of contributors: Ezra Pound, James Joyce (whose **Ulysses** was first printed in **Little Review**). Sherwood Anderson, T.S. Eliot, Ernest Hemingway, W.B. Yeats, Ben Hecht, William Carlos Williams, Djuna Barnes, Brancusi, Aldous Huxley, Tristan Tzara, Emma Goldman, Gertrude Stein, Jean Cocteau, Wyndham Lewis, Dorothy Richardson, Francis Picabia, Guillaume Apollinaire. The inside back cover of later issues of the magazine thundered, **What other American publication old or new has done as much in equal or double or quintuple the number of pages?**

The **Little Review** started as a small, drab little monthly with a foreword by John Galsworthy and a flowery critical style. "What I needed," Anderson later wrote, "was not a magazine but a club room where I could have informed disciples twice a week that nature was wonderful, love beautiful, and art inspired." By the third issue the criticism was more sophisticated, and Anderson had discovered her first controversy: anarchism. After Emma Goldman became a regular contributor, ads were cancelled, subscriptions were dropped, and Anderson herself was disowned by her mother. She put a subhead under the cover logo: **A Magazine of the Arts, Making No Compromise with the Public Taste**. Thereafter her search for quality work embraced, in succession, feminism, imagism, cubism, surrealism, dadaism, and experimentalism in general.

In 1917 Ezra Pound, whom she had never met, wrote to ask for a position as foreign editor. Anderson accepted, and Pound helped bring a lot of European experimental writing, including **Ulysses**, into the magazine. From a letter to Joyce, Pound apparently regarded Anderson as a well-intentioned but flighty artiste whose publication was a good resource but who was careless about typos.

But she was not a dilettante, despite all the fun she seemed to be having. She had strong ideas about what was good, what wasn't, and why. She knew when the **Little Review** was printing inferior material; in 1916 she printed an issue of blank pages because no one was sending her good work. She never let anyone give money on condition of dictating the contents of the magazine. And in 1922 she paid a fine and risked a jail sentence because the U.S. Postal Service considered **Ulysses** obscene.

All literary accounts agree that she created a magazine which the people who would become writers and artists of the 30s and 40s read. Along with **Poetry** the **Little Review** is considered the most influential small magazine of its time.

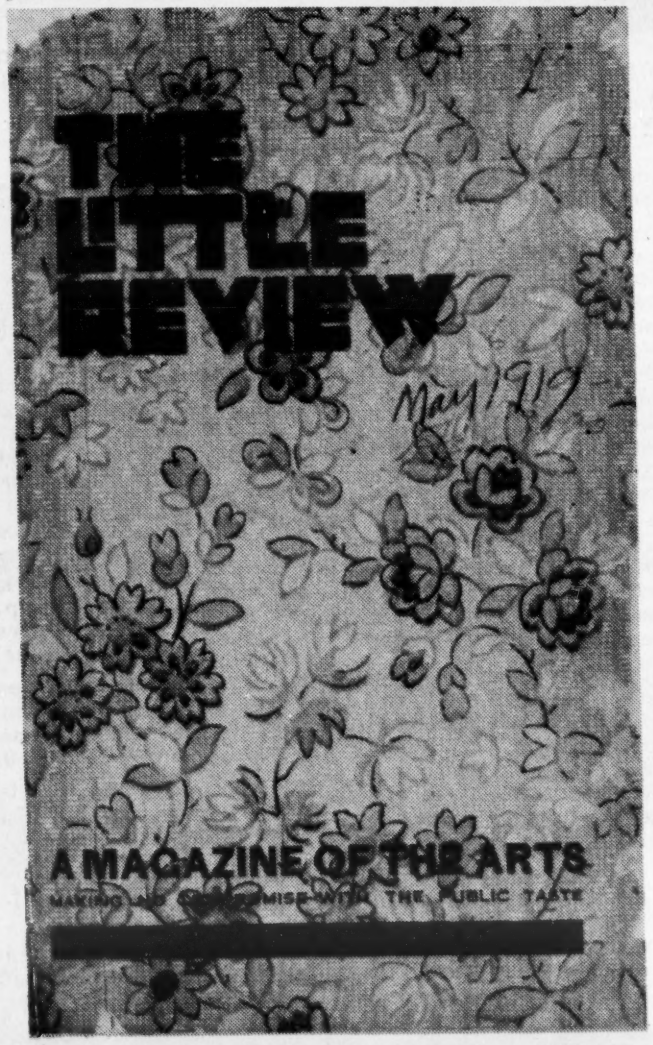
I want to reproduce a conversation printed in its pages, between Anderson (MCA) and her friend and constant contributor, Jane Heap (jh). They lived together during most of the magazine's history, and Heap, known to readers only by her initials, defended the aesthetic stance of the magazine in a series of short critical articles. There is one published photograph of jh: it shows a young, stout, half-Norwegian woman with choppy brown hair and a look of sardonic detachment. Both women were compulsive talkers and argued continuously with each other, Anderson in exaggerated gasps and Heap in an acerbic monotone:

Scene: The Little Review in ineffectual consultation over the major tragedies of the winter. jh, resembling — Knut Hamsun? M.C.A. — Elsie Dinsmore?

MCA: With all the exasperations of contemporary life, I seem on the point losing my interest in things.
jh: Give me a few moments of your exasperated time and we'll get out another of our famous annuals.
MCA: Known as the *Little Review?*
jh: Not so largely known.

(atmosphere of concentrated impotence)

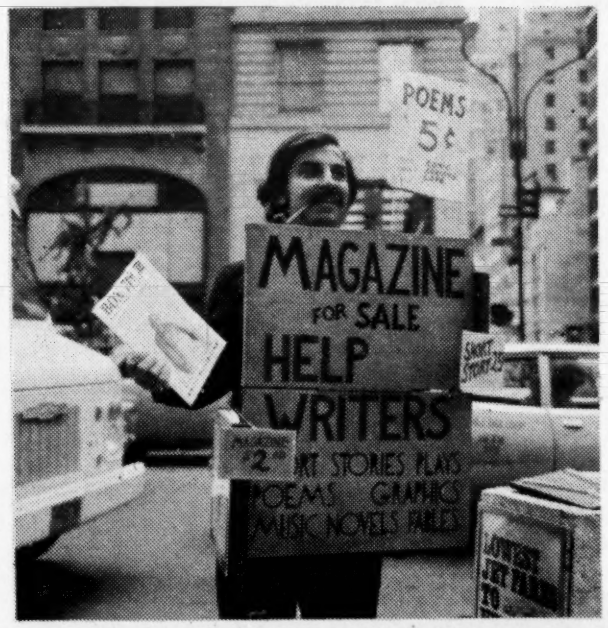
MCA: We must act!
jh: I see a great deal of action all over the place.
MCA: You must create!
jh: I know of no commandment to create.
MCA: You might do something if you weren't so neurotic!
jh: Since when have the unneurotic been so creative?
MCA: Don't be Norwegian! I shall go mad!
jh: Don't! There are no modern asylums!
MCA: *(fuming)* Just *what* do you mean?
jh: No cells padded with mirrors . . .
MCA: *(diverted — looking in the glass with satisfaction)* At least I'm good-looking!
jh: !
MCA: And you are extremely handsome!
jh: !
MCA: Of course if I weren't so intelligent —
jh: !



May, 1919 issue

MCA: I might be more effective. It's perfectly true. It's not logical for me to have brains. And *you* might be more effective if you weren't so diabolical. As our enemies so prettily say: Destroy if you must but don't devastate!
jh: *(turns a Norwegian profile toward the interesting talker)*
MCA: If we didn't waste so much time in good conversation we might at least be self-supporting!
jh: *Be* self-supporting — and take the conversation that goes with it.
MCA: Well . . . it might be called an impasse . . .
jh: *(allows her hand to droop from the wrist in the manner she is glad to know terrorizes her companion)*
MCA: But thank heaven *I* can get some ecstasy out of life!
jh: Why limit me to ecstasy?

For every **Little Review** or **Poetry** with a lasting reputation, hundreds of small press magazines appear and disappear with little impact on the culture. By the seventies, the little magazine scene had blossomed into a widespread renaissance: national organizations, bookfairs, distribution networks, reviewers and federal grants. Like early magazines, most little magazines carry almost no advertising. They rarely sell enough copies to make a profit; other income comes from donations and selling the correspondence of prominent contributors. The act of publishing and editing a small magazine is exhilarating and consumes all of an editor's spare time. Most of that time is drained by circulation — getting people to acknowledge the magazine exists. Few large distributors carry the small press.



David Ferguson, publisher/editor of **Box 749**, *on the New York streets hawking magazines and poems.*

Small press magazines are often judged against the commercial ones, even though they have different goals and expectations. Next to the slicks, most literary magazines look — amateurish. Or else inbred: part of a carefully constructed, literary-critical establishment. For the consumer, there isn't that much reason to look through the hundreds on the shelves of a large bookstore. This is changing as new small magazines try to reach a less insulated audience, but it's still almost impossible to be noticed on a scale large enough to insure economic survival.

Magazines may bloom most dramatically where alternatives are most needed — in local communities and corporate house organs. Those company and regional magazines which experiment with in-depth reporting, and alternative graphic styles which don't parrot the slicks, seem to latch onto a real, otherwise unspoken, demand.

One or two magazine historians suggest that with increasing computerization, magazines will be individually directed to subscribers. A reader with interests and habits on file will receive one magazine with his/her name on it, and articles and ads tailored to his/her life — what movies are playing in the neighborhood, what the relatives are doing, and fully personalized daily horoscopes. More likely, computers will eventually break down the structure of the print media. Once magazines, newspapers and books start to come in over the home terminal, or the terminal down at the corner computer center, then the boundaries between them won't be necessary; they'll merge into a steady flow of information, stories, opinions, pictures, design, photographs. You might never have to stop reading: like Homer Price's doughnut machine, the terminal will type out the stories, and the phototypesetter will click, buzz and release the photocopied pages, and printouts will pile high in the recycling centers. If input channels are kept open, advertisers might lose their hold on the magazines, and designers will have to develop another new language to give visual personality to a flowing, undivided stream. ■

My information came from dozens of old magazines, and a number of books, of which the most helpful were these:

Anderson, Margaret, **My Thirty Years' War**, Stratford Press, 1930. Also, **The Little Review Anthology**, Hermitage House, 1953. Edom, Clifton C., **Photojournalism — Principles and Practices**, Wm. C. Brown, 1976. Elson, Robert T., **Time, Inc. (The Intimate History of a Publishing Enterprise 1923-1941)**, Atheneum, 1968. Graham, Walter, **English Literary Periodicals**, Thomas Nelson, 1906, Hurlburt, Allen, **Publication Design**, Van Nostrand Reinhold, 1971. Nelson, Roy Paul, **Publication Design**, Wm. C. Brown, 1972. Newhall, Beaumont, **The History of Photography from 1839 to the Present Day**, Doubleday/Museum of Modern Art, 1964. Peterson, Theodore, **Magazines in the Twentieth Century**, 2nd ed., U. of Illinois, 1964. Rowsome, Frank, **They Laughed When I Sat Down — An informal history of advertising in words and pictures**, McGraw-Hill, 1959. Steinberg, S.H., **Five Hundred Years of Printing**, Penguin, revised 1966. Watkins, Julian Lewis, **The 100 Greatest Advertisements — who wrote them and what they did**, Dover, 1959.

Some magazines that I left out or mentioned casually probably deserved more space: **Harper's Monthly** (before 1925), **Vanity Fair**, **Gentleman's Magazine**, **Poetry**, **Rolling Stone**, **City**, **Ladies' Home Journal** (around 1900). All of these were innovative and/or influential, but I didn't want to write an exhaustive history, only to develop a series of spotlights. I avoided mentioning by name any small press magazines, trade magazines, pulps, newsletters, or fanzines for the same reason.

I did nearly all my research at the University of California, Berkeley campus library system, which had everything I needed except Vanity Fair. I'm also grateful to the Time, Inc. archives in New York, where I was allowed to poke around for most of a day.

Picture Credits

Page 60: **The Spectator**, Issue no. 78, May 30, 1711. Picture of Joseph Addison in his maturity from a portrait by Joseph Kneller, in **The Life of Joseph Addison** by Peter Smithers, Clarendon, 1954.

Page 61: Rotary press from Rand McNally time chart of the history of the world, 1876. **Munsey's Magazine**, spread from vol. 15, no. 2, May, 1896, pp. 130-1.

Page 62: City woodcut by Erhard Reuwich, printed by Peter Schoffer in Mainz, Germany, 1486, reprinted in Steinberg, **500 Years of Printing**, 1966 edition, p. 157. Civil War print from **Harper's Weekly**, August 19, 1862, p. 500. Rochester flood photo by Franklin W. Bacon and John Wilson Taylor, 1865. Engraved in **Harper's Weekly**, April 8, 1865. Both reprinted from Newhall, **History of Photography**, p. 177.

Page 63: The first halftone, Shantytown, in **The Daily Graphic**, New York, October 25, 1876; reprinted in Edom, **Photojournalism**, p. 16. Paul Nadar, a still from his photo-interview with physicist Marie-Eugene Chevreul, 1886, reprinted in Newhall, **History of Photography**, p. 182.

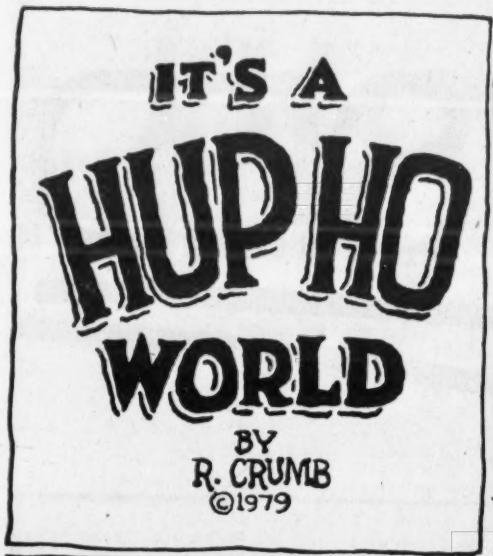
Pages 64-65: "Impact" ad in **Fortune**, 1930; written by Raymond Rubicam, reprinted in Watkins, **100 Greatest Ads**, p. 96. **Mother Jones** cover, January 1979. **New Yorker** spread, June 15, 1935, pp. 6-7.

Page 66: **Fortune** issue of May, 1932, cover and pp. 72-73. Photograph by Aiklee. Art editor, Eleanor Treacy.

Page 67: **Vogue**, Feb. 15, 1938 issue, pp. 92-93. Art director, M.F. Agha. **Esquire**, May, 1954 issue, pp. 78-79. Graphics editor, Henry Wolf.

Pages 68-69: Margaret Anderson photograph originally published in **The Little Review**, 1929; reprinted in her second autobiography, **The Fiery Fountains**, 1951. **Little Review** cover, 1919.

Page 70: The David Ferguson photograph by Sidney Fields first appeared in the **New York Daily News** on October 10, 1974.


IT'S A
HUP HO
WORLD
BY
R. CRUMB
©1979

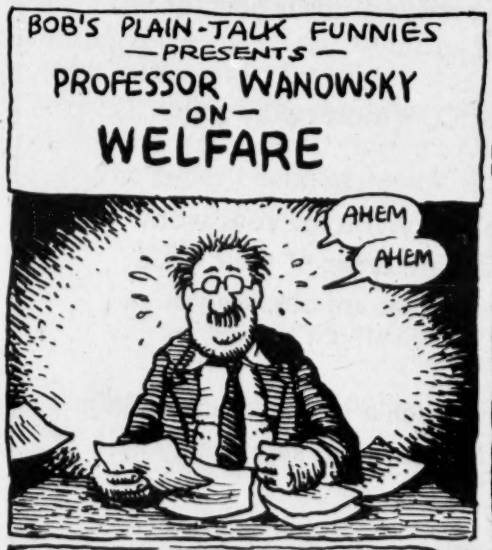
TAKING MY REAL ESTATE EXAM TODAY!
HUP
HUP
HUPPITY HUP
HUP BURGER
SHLOCK MEISTER

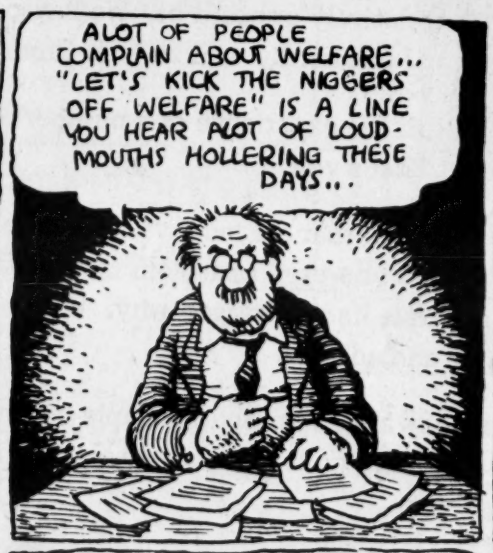
GOIN' TO TH' BEAUTY PARLOR!
HUP
HUP
HUP

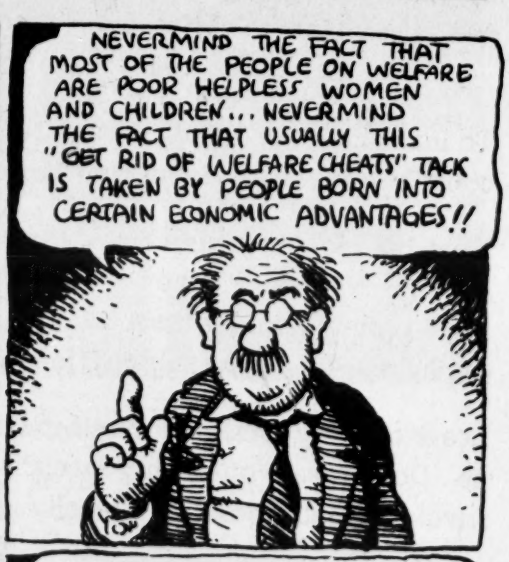
I SO HAPPY!
HUP
HUP
WHUPPO!

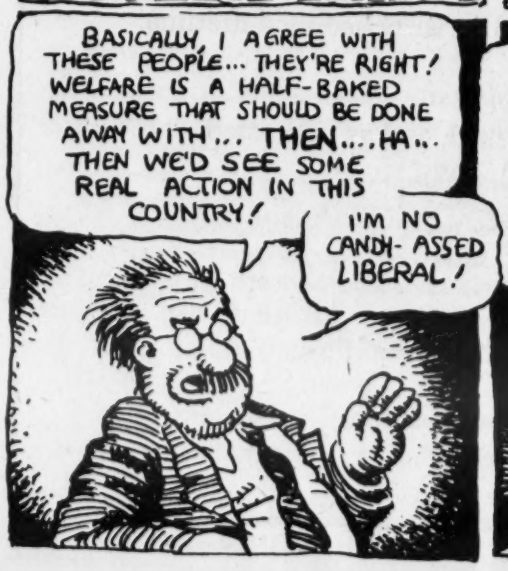
HUP YOU, MOE-FOE!!
HUP
HUP
HUP
HULP

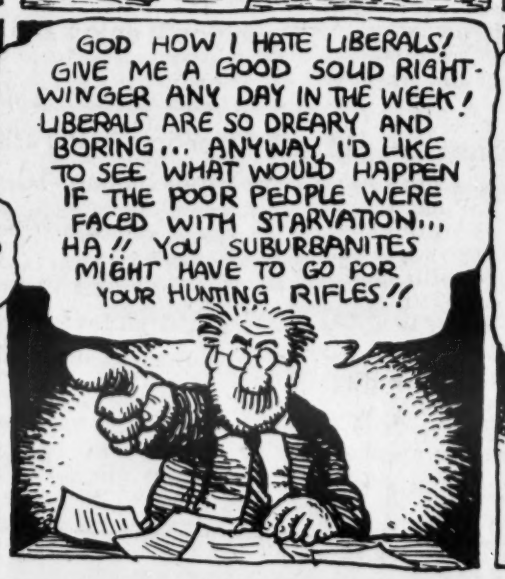
AND DON'T FORGET TO FIGHT THE OPPRESSOR!!
HUP
HUP
HUP
HUP
HUP

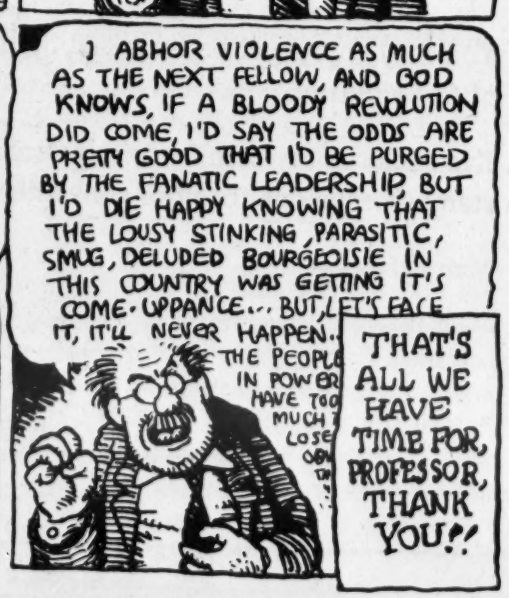

BOB'S PLAIN-TALK FUNNIES
—PRESENTS—
PROFESSOR WANOWSKY
—ON—
WELFARE
AHEM
AHEM


ALOT OF PEOPLE COMPLAIN ABOUT WELFARE... "LET'S KICK THE NIGGERS OFF WELFARE" IS A LINE YOU HEAR ALOT OF LOUD-MOUTHS HOLLERING THESE DAYS...


NEVERMIND THE FACT THAT MOST OF THE PEOPLE ON WELFARE ARE POOR HELPLESS WOMEN AND CHILDREN... NEVERMIND THE FACT THAT USUALLY THIS "GET RID OF WELFARE CHEATS" TACK IS TAKEN BY PEOPLE BORN INTO CERTAIN ECONOMIC ADVANTAGES!!


BASICALLY, I AGREE WITH THESE PEOPLE... THEY'RE RIGHT! WELFARE IS A HALF-BAKED MEASURE THAT SHOULD BE DONE AWAY WITH... THEN....HA.. THEN WE'D SEE SOME REAL ACTION IN THIS COUNTRY!
I'M NO CANDY-ASSED LIBERAL!


GOD HOW I HATE LIBERALS! GIVE ME A GOOD SOLID RIGHT-WINGER ANY DAY IN THE WEEK! LIBERALS ARE SO DREARY AND BORING... ANYWAY, I'D LIKE TO SEE WHAT WOULD HAPPEN IF THE POOR PEOPLE WERE FACED WITH STARVATION... HA!! YOU SUBURBANITES MIGHT HAVE TO GO FOR YOUR HUNTING RIFLES!!


I ABHOR VIOLENCE AS MUCH AS THE NEXT FELLOW, AND GOD KNOWS, IF A BLOODY REVOLUTION DID COME, I'D SAY THE ODDS ARE PRETTY GOOD THAT I'D BE PURGED BY THE FANATIC LEADERSHIP, BUT I'D DIE HAPPY KNOWING THAT THE LOUSY STINKING, PARASITIC, SMUG, DELUDED BOURGEOISIE IN THIS COUNTRY WAS GETTING IT'S COME-UPPANCE... BUT, LET'S FACE IT, IT'LL NEVER HAPPEN..
THE PEOPLE IN POWER HAVE TOO MUCH TO LOSE
THAT'S ALL WE HAVE TIME FOR, PROFESSOR, THANK YOU!!

USED

December 22, 1978

Dear _____

If I can get your brief help on this one you get a lifetime subscription to *The CoEvolution Quarterly* (worth, let's see, $480 if we both last another 40 years).

I have long complained that no periodical in the world routinely reviews other periodicals (except the somewhat offhand magazines department in *Library Journal*). And I have long asserted that periodicals are far more useful than books for beginning and maintaining working knowledge in any particular field.

So *The CQ* is starting a regular magazine section in the Spring '79 issue. In it we'll review, as usual, periodicals that are useful, interesting, or relatively unheard of. We'll also review – this is new for us – popular periodicals we think are rotten (I can hardly wait to bust *Omni*).

To inaugurate the section, I want to publish the experience of a number of *CQ*'s most noteworthy contributors and potential contributors. That's you.

What I'm looking for is a list of the periodicals that are most valued and used by you for your work and life. Not the ones you admire, the ones you use. List them in approximate order of their value to you (most valuable first) and give a couple lines of reason why. With ones that are obscure you can help us by adding subscription price and address.

Leave out very local periodicals unless they are an unusual example of what such a publication should be. Do not leave out highly specialized or foreign language journals. Do not leave out supposedly frivolous publications if you really use them.

You may enjoy and be surprised by the exercise. I hope you'll enjoy and be surprised by a lifetime of *CoEvolution*.

I've enclosed my own favorite periodical list, a list of the people being asked, and an addressed stamped envelope for your convenience. We need your reply by Jan. 10, 1979.

Many thanks!

Stewart

Stewart Brand
Editor

MAGAZINES

63 strange people tell what they read – 378 strange magazines is what.
To join up, see pp. 124 - 130 for ordering information.

BRUCE AMES

Biochemist, deviser of the Ames test for carcinogenicity and mutagenicity.

Current Contents (Life Sciences)
$150/yr. (52 issues)

This periodical publishes the table of contents of some 1,000 or so scientific journals and also the address of the first author of each scientific paper in these journals. It comes out weekly, and by scanning the 250-odd tables of contents of those 250 journals each week, I, and tens of thousands of other scientists, keep up with this flood of information. I find it indispensible. Garfield, who runs the **Current Contents** family of periodicals (I think there is one in the Social Sciences now as well), is an extremely innovative fellow who makes useful informational tools available for scientists. Garfield also publishes the very useful **Science Citation Index**, which puts the bibliographies of all the scientific papers published in the world into a computer every week and prints them out every three months – a clever idea and an extremely useful compendium. After I publish a scientific paper I can keep track (from then on) of all the scientific papers that refer to my paper. The **Index** is useful in many ways: measuring scientific impact, sociology of science, etc.

New York Review of Books
$14.50/yr. (22 issues)

The literary periodical I enjoy the most. They are first-rate on scientific matters when they do deal with them, which is surprisingly often.

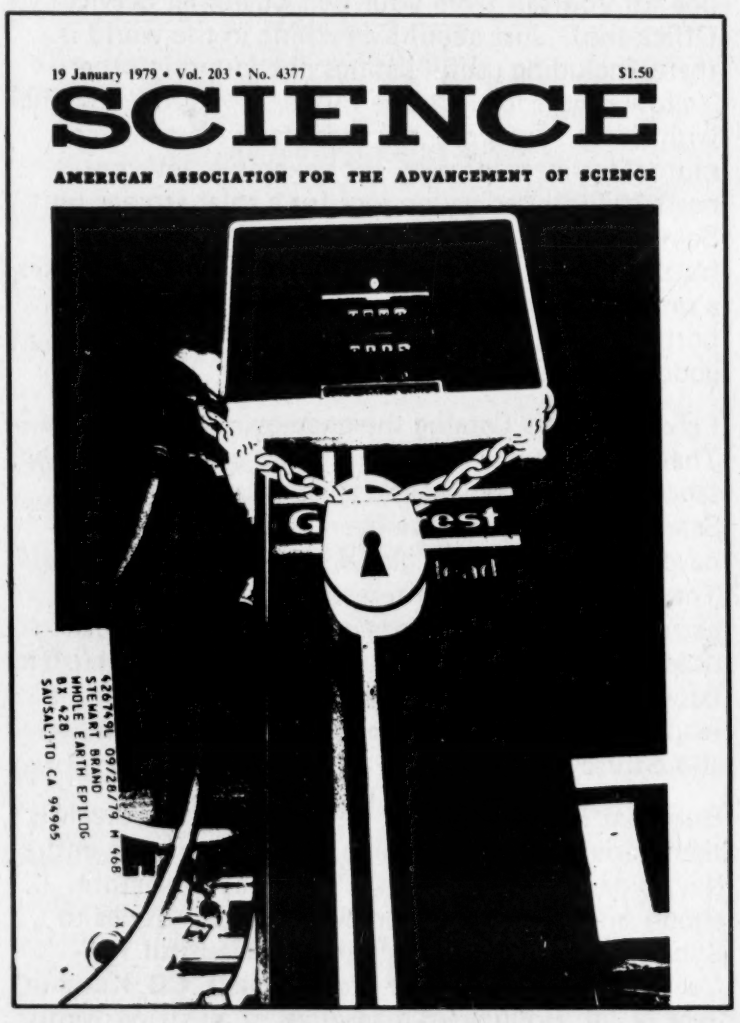
Nature
$165/yr. airmail (52 issues)

The British counterpart of **Science**. News and Views and Politics of Science, and much first-rate Molecular Biology.

Proceedings of the National Academy of Sciences
$60/yr. (12 issues)

The journal of the National Academy of Sciences. Publishes just about the most interesting scientific papers in the biological field. Each paper is limited to five pages so that one struggles to say things concisely when one is writing for it, but it is a strong brew when reading it.

MAGAZINE ORDERING INFORMATION p. 124



At or near the top of more people's lists than any other publication is **Science**. *Recommenders include Gary Snyder, Robert Rodale, Paul Ehrlich, Anne Ehrlich, Ernest Callenbach, Herman Kahn, Ray Dasmann, Robert Ornstein, Stewart Brand, Luna Leopold, James Lovelock, William Sturtevant, Michael Phillips, Michael Harner, Peter Warshall, James Parsons, Francisco Varela, and Peter Vajk.*

For your convenience the reviewers are printed alphabetically in this section – from Bruce Ames to Paul Winter.

Because the members of the Academy can send in papers without scientific refereeing, which is customary in all other scientific journals, papers can be published in the record time of two months from receipt. It has thus become the place to publish hot work in exciting fields if you are a member of the National Academy of Sciences; if you are not, you may be able to talk a member of the Academy into communicating a paper for you.

J. BALDWIN
CQ Soft Tech editor

Ah yes . . . periodicals. Well, I of course read many of the same ones you list, plus most of the ones the **CQ** subscribes to. I also read **National Geographic** ($10/yr., 12 issues), which keeps my romantic wanderlust sufficiently in check by offering me vicarious adventure. Otherwise I'd never get any work done. I also like **Audubon** ($13/yr., 6 issues), which is where I keep track of environmental matters as well as getting an incremental education on Natural Wonders.

About once a year, I check out a **Manhattan Yellow Pages** from the local university library (you can order one for yourself from your Bell Customer Service Office too). Just about everything in the world is there, including useful listings not found in other Yellow Pages; for instance Finders. Finders, together with Factors, will get you together with people of mutual business interest. For example, let's say I need 10,000 used gallon jugs for a solar storage unit. Someplace there is somebody with 10,000 used bottles to sell. The Finder gets us together and takes a small cut as his fee. If you're the man with the bottles to sell, you call a Factor, who then lists his goods with the Finder. Like that.

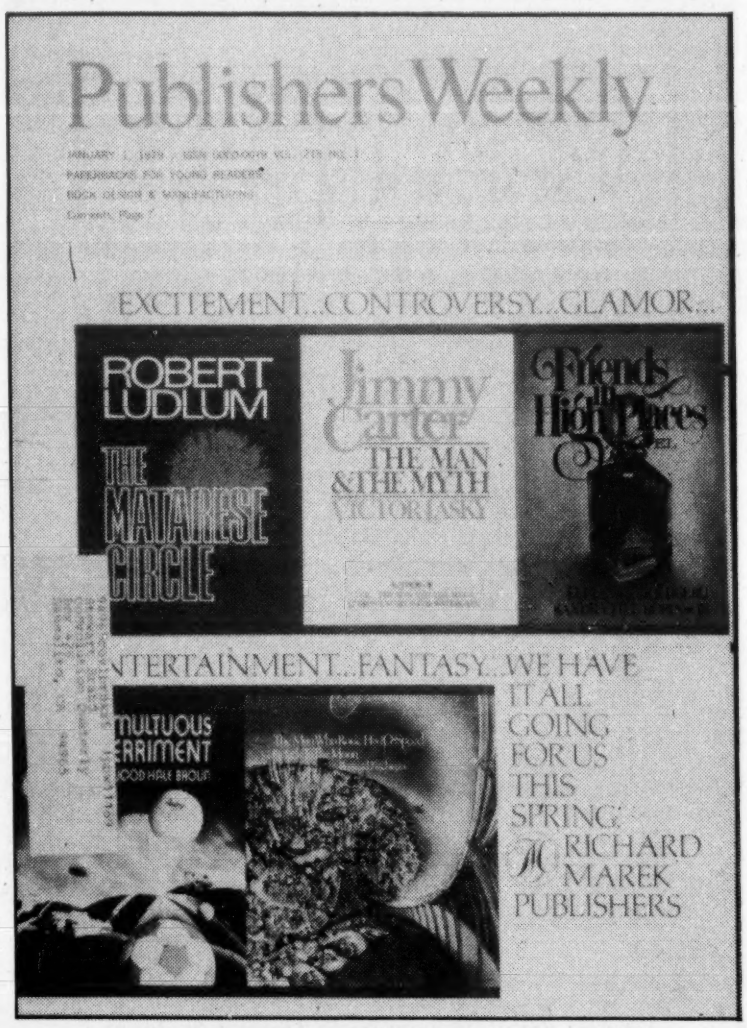
I give the **Sears Catalog** the once-over quarterly too. That's where you first see verified "consumer acceptance" of fads, trends, and conventional wisdom. Sears watchers who have been at it for many years have an advantage; the glacier moves ever so slowly. The catalog is also an interesting social document as you note subtle changes in the type of models used, and their poses. It's a good place to establish a base line for product prices and availability, too. I read lots of catalogs besides Sears, including university course catalogs.

But what I've found most useful about periodicals is their variety. Several times a year, I reserve an entire day to peruse the stock of a large magazine store. I snoop into everything from **Modern Hair Styles** to **Supermarket Manager's Monthly. Beautiful Ten-Year-Old Boys, Battles of World War II, CB, Kung-fu, Jack & Jill**, Hollywood magazines of all stripe, **Motor Trend, Four Wheel Drive, Orchid Raising, Consumer Reports, Playboy** and **Playgirl, Woman's Day, Art News, Modern Camera, SKI, Bicycling, Vogue Patterns, Field & Stream, Dogs, Cats, Horses . . .** egad! Snoop-reading gives me a cross-section of what is going on in this vast country. Perhaps it's a bizarre idea, but I have found over the years that the habit really does seem to reveal trends. I usually make peace with the magazine store by buying one now and then as the day progresses. I am limited, finally, by curvature of the spine, clatter from the mental storage-retrieval system, and squint.

This game can also be played in the periodical room of a big library. If it is a university library, you will soon be into things you have never even *heard* of, let alone suspected that there were enough people interested to make possible a specialized magazine. There must be a "Journal of" for every possible subject of human endeavour in nearly every language." Most universities admit anyone at all to the periodical room without an ID, and furnish you with good light and a nice chair too. Whenever I get to feeling provincial, I hie me to the nearest one and settle in for a spell. Makes me feel good all over. I've found that a significant number of the successful ideas and good times of my life have come rather directly from being able to say, "I remember reading about some people that were . . ." Specialist periodicals are also the best place to establish access to further knowledge in that field; not so much from facts given in the feature articles, but in the *ads*. Advertisers are who has reduced the theory to practical usefulness, if that's what you need. As I get more and more into interdisciplinary design work, such information is not only useful, but essential. That's where I find new catalogs too.

Most popular general magazine, read by: Ernest Callenbach, Lynn Margulis, Ursula LeGuin, Sam Keen, David Shetzline, John Todd, Anne Waldman, Heinz Von Foerster, Lynn Thompson, Adam Smith, Anne Herbert, Alice Tepper Marlin, William Sturtevant, Maj. Gen. Frank Schoeber, and William Irwin Thompson.

Tip: In the above wideband snooping tactics, it is useful to develop a speedreading style appropriate to the task. Most articles size up the subject matter at hand in the first few paragraphs, and sum it up in the last few. If there are illustrations, the captions will help you decide if you want to read every word. Many specialist publications also include a summary or abstract, sometimes in the table of contents. This is just as well, as the sort of journal that has abstracts is likely to be one of the sort that requires a concept to be imbedded in "academese" which you don't



Publisher's Weekly *is read by Ian Ballantine, Robert Ornstein, Stewart Brand, and Adam Smith. It always has an advertisement on the cover.*

have the time (or inclination) to read. You can test your "screen" by trying it out on a few articles and then reading them more carefully to see if you missed something important. After you get your screen adjusted to a useful mesh, you can really roar along. You won't miss much, because mostly all you want is to be informed of the existence of a phenomenon, not to become an expert in the field. Hope this helps.

IAN BALLANTINE

Publisher, editor; originator of paperback books in U.S., founder of Ballantine Books, now with Bantam

Publisher's Weekly
$33/yr. (51 issues)

I have read almost every issue for the last 40 years as it tells what is happening and what is not happening in the book trade.

The New York Times
$150/yr. (365 issues)

All the news. If out of town, I read through the accumulated pile when I return.

The New York Times Book Review
$18/yr. (52 issues)

Locus
$9/yr. (12 issues)

The best science fiction magazine – all the science fiction news.

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Starlog
$11.98/yr. (8 issues)

Future
$10.98/yr. (8 issues)

Two rapidly developing magazines with strong interests in space and fantasy art.

Fantasy Newsletter
$5/yr. (12 issues)

A good fanzine about fantasy.

Natural History
$10/yr. (10 issues)

General interest articles and beautiful photography.

Not Man Apart
$10/yr. (6 issues)

Environmental news.

The Mother Earth News
$12/yr. (6 issues)

How to do it.

American Artist
$17/yr. (12 issues)

Most up-to-date art magazine.

GREGORY BATESON

Biologist, anthropologist, philosopher; author of **Steps to an Ecology of Mind** *and* **Mind and Nature**

Alas, I cannot do this. I never read "a magazine" except in dentists' waiting rooms, and I never go to dentists. I have no opinions at the logical level of "magazine."

WENDELL BERRY

Farmer, novelist, essayist, poet; author of **The Unsettling of America, A Continuous Harmony, The Memory of Old Jack, The Country of Marriage**

Much as I would like to read free the next 40 years of **CQ**, my periodical reading is *far* too haphazard for me to make a competent judgment. In the last few years I believe I have made more direct use of **CQ** than any other magazine I get. (How many years subscription do I get for that?) But I have, I think, made still more use of clippings that people send me in the mail. I read in (and at) a *few* literary periodicals. But I am more and more a book reader. Occasionally on plane trips I read news magazines, etc., and am either offended or bored. The same stupid public stuff continues to happen. I am not the first to believe that the real news is in the classics.

MURRAY BOOKCHIN

Anarchist scholar, author of **Post-Scarcity Anarchism, Spanish Anarchists, Our Synthetic Environment, The Limits of The City,** *and* **Hip Culture**

Comment
$5/yr. (17 issues)

One of the more provocative tri-weekly Anarchist newsletters in the United States, a voice for revolution in an era of mincing reformism. Ecological in outlook and free of sectarian dogmatism. I publish it. *[more→]*

Telos
$2/yr. (4 issues)

A heavy but often thoughtful radical philosophical quarterly. Led in the rediscovery of the Frankfurt School.

Our Generation
$7/yr. (4 issues)

A serious Canadian Anarchist quarterly that publishes probing articles on a wide variety of social problems and perhaps some of the best books in English.

The Second Wave
$8/yr. (4 issues)

The most exciting feminist periodical published in the United States. Sensitive, provocative and creative — a constant challenge to machismo journalism.

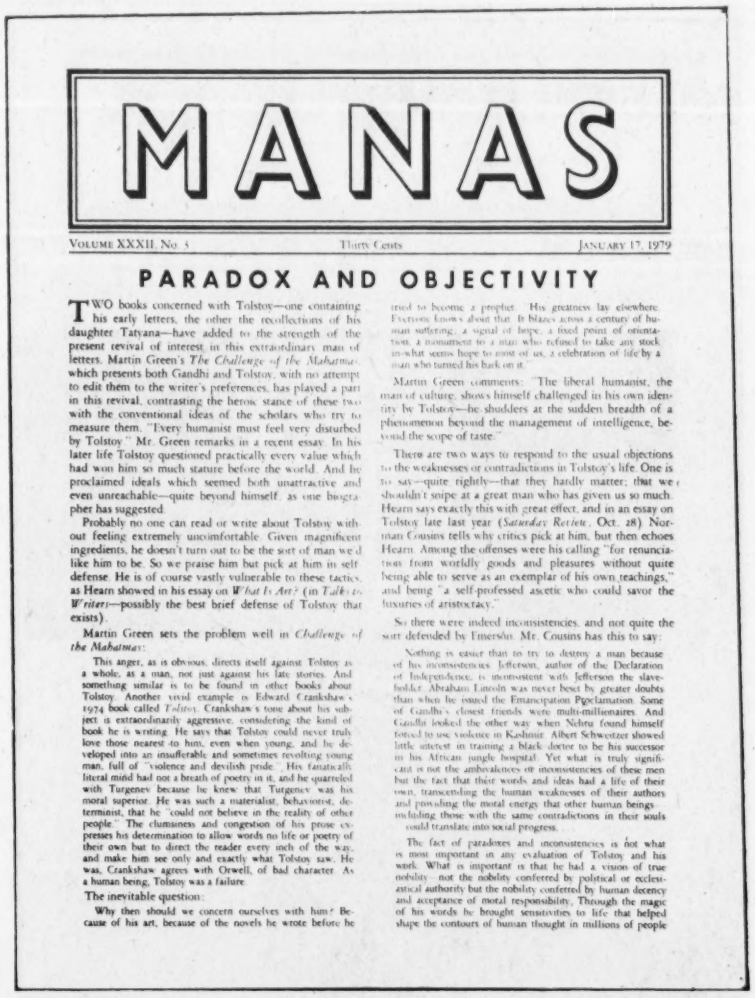
New Age
$12/yr. (12 issues)

One of the finest, most responsible holistic health magazines available. Entire issues often focus on single topics from cancer to ecoarchitecture.

CoEvolution Quarterly
$12/yr. (4 issues)

Cynical and starry-eyed, opportunistic and principled, pragmatic and naive, manipulative and socially committed — in short, an uncanny reflection of the beatnik perversity of its editor, Stewart Brand.

You're holding it, so what more do you need in the way of information?



MANAS

VOLUME XXXII, No. 3 — Thirty Cents — JANUARY 17, 1979

PARADOX AND OBJECTIVITY

TWO books concerned with Tolstoy—one containing his early letters, the other the recollections of his daughter Tatyana—have added to the strength of the present revival of interest in this extraordinary man of letters. Martin Green's *The Challenge of the Mahatmas*, which presents both Gandhi and Tolstoy, with no attempt to edit them to the writer's preferences, has played a part in this revival, contrasting the heroic stance of these two with the conventional ideas of the scholars who try to measure them. "Every humanist must feel very disturbed by Tolstoy," Mr. Green remarks in a recent essay. In his later life Tolstoy questioned practically every value which had won him so much stature before the world. And he proclaimed ideals which seemed both unattractive and even unreachable—quite beyond himself, as one biographer has suggested.

Probably no one can read or write about Tolstoy without feeling extremely uncomfortable. Given magnificent ingredients, he doesn't turn out to be the sort of man we'd like him to be. So we praise him but pick at him in self-defense. He is of course vastly vulnerable to these tactics, as Hearn showed in his essay on *What Is Art?* (in *Talks to Writers*—possibly the best brief defense of Tolstoy that exists).

Martin Green sets the problem well in *Challenge of the Mahatmas*:

> This anger, as is obvious, directs itself against Tolstoy as a whole, as a man, not just against his late stories. And something similar is to be found in other books about Tolstoy. Another vivid example is Edward Crankshaw's 1974 book called *Tolstoy*. Crankshaw's tone about his subject is extraordinarily aggressive, considering the kind of book he is writing. He says that Tolstoy could never truly love those nearest to him, even when young, and he developed into an insufferable and sometimes revolting young man, full of "violence and devilish pride." His fanatically literal mind had not a breath of poetry in it, and he quarreled with Turgenev because he knew that Turgenev was his moral superior. He was such a materialist, behaviorist, determinist, that he "could not believe in the reality of other people." The clumsiness and congestion of his prose expresses his determination to allow words no life or poetry of their own but to direct the reader every inch of the way, and make him see only and exactly what Tolstoy saw. He was, Crankshaw agrees with Orwell, of bad character. As a human being, Tolstoy was a failure.

The inevitable question:

> Why then should we concern ourselves with him? Because of his art, because of the novels he wrote before he tried to become a prophet. His greatness lay elsewhere. Everyone knows about that. It blazes across a century of human suffering, a signal of hope, a fixed point of orientation, a monument to a man who refused to take any stock in what seems hope to most of us, a celebration of life by a man who turned his back on it.

Martin Green comments: "The liberal humanist, the man of culture, shows himself challenged in his own identity by Tolstoy—he shudders at the sudden breadth of a phenomenon beyond the management of intelligence, beyond the scope of taste."

There are two ways to respond to the usual objections to the weaknesses or contradictions in Tolstoy's life. One is to say—quite rightly—that they hardly matter; that we shouldn't snipe at a great man who has given us so much. Hearn says exactly this with great effect, and in an essay on Tolstoy late last year (*Saturday Review*, Oct. 28) Norman Cousins tells why critics pick at him, but then echoes Hearn. Among the offenses were his calling "for renunciation from worldly goods and pleasures without quite being able to serve as an exemplar of his own teachings," and being "a self-professed ascetic who could savor the luxuries of aristocracy."

So there were indeed inconsistencies, and not quite the sort defended by Emerson. Mr. Cousins has this to say:

> Nothing is easier than to try to destroy a man because of his inconsistencies. Jefferson, author of the Declaration of Independence, is inconsistent with Jefferson the slaveholder. Abraham Lincoln was never beset by greater doubts than when he issued the Emancipation Proclamation. Some of Gandhi's closest friends were multi-millionaires. And Gandhi looked the other way when Nehru found himself forced to use violence in Kashmir. Albert Schweitzer showed little interest in training a black doctor to be his successor in his African jungle hospital. Yet what is truly significant is not the ambivalences or inconsistencies of these men but the fact that their words and ideas had a life of their own, transcending the human weaknesses of their authors and providing the moral energy that other human beings, including those with the same contradictions in their souls, could translate into social progress.

The fact of paradoxes and inconsistencies is not what is most important in any evaluation of Tolstoy and his work. What is important is that he had a vision of true nobility—not the nobility conferred by political or ecclesiastical authority but the nobility conferred by human decency and acceptance of moral responsibility. Through the magic of his words he brought sensitivities to life that helped shape the contours of human thought in millions of people

Stewart Brand, William Irwin Thompson, John McKnight, Malcolm Wells and Alex Grey read MANAS.

STEWART BRAND
CQ editor

Science
$65/yr (52 issues)

This is the source for most of the news that I use to make decisions about my life and magazine. Surprisingly it also has some of the best political analysis in print.

New Scientist
$54/yr (52 issues)

A model to me of how science, good reporting, and social responsibility can blend. Many of **CQ**'s themes — the Gaia hypothesis, space colonies — started here.

National Fisherman
$10/yr (12 issues)

This unpretentious tabloid for traditional boat users makes me vibrate when it arrives. It revels in boatness and the quality which that is about. I get the same feeling of no-bullshit from it that I got from Army surplus when I was young.

Wall Street Journal
$55/yr. (260 issues)

The only daily newspaper I use. I like its gloss of the "news," the often conceptual news in its center page-one story, the raw data it's full of begging for interpretation, the book and film reviews, and the latest on my punk stocks.

Publishers Weekly
$33/yr. (51 issues)

My major source, along with **Science**'s "books received" and **Library Journal**, of titles to order review copies of. Also it keeps me informed of what book subjects are growing old and how far the dry-rot in the publishing business has advanced. You can love books or money, not both, this magazine reminds me.

TV Guide
$15.50/yr. (52 issues)

There's occasional good stuff on the tube. Without **TV Guide** I'd never find it.

Pacific Sun
$10/yr (52 issues)

The Marin County paper, far different from a newspaper, that hands me my community.

Manas
$10/yr. (44 issues)

Henry Geiger's philosophical humanistic journal. The good thoughts that lead to and emerge from good actions. He uses old books in renewed ways.

Science News
$15.50/yr (52 issues)

A quick clear scan for tidbits and leads.

Human Behavior
$14/yr (12 issues)

Stands head and shoulders above the crowd of human potential-type publications. I read the articles and change my mind sometimes.

In These Times
$17.50/yr (50 issues)

As a mossback conservative I particularly appreciate getting a non-sectarian Left view of well-sought and well-reported news. Far ahead of **Mother Jones**, **Seven Days**, and their ilk.

Richard Brautigan and Paul Krassner read **National Enquirer.**

Quest
$16/yr (7 issues)

Best new general interest magazine in years. It proves that good news is good news.

RICHARD BRAUTIGAN

Poet, novelist; author of Troutfishing In America; Dreaming of Babylon; The Hawkline Monster; June 30th, June 30th; In Watermelon Sugar
©1979 by Richard Brautigan

Farewell to the First Grade
and Hello
to the **National Enquirer**

I always had trouble with school, especially the first grade. I became the tallest kid in the first grade by flunking it a couple of times. I just could not figure out how the first grade worked. I started off in the first grade as an average-size kid and a couple of years later I was the tallest kid in the first grade.

Reading was a particular problem for me. It did not make any sense at all. For the first couple of years that I spent in the first grade I might as well have read the books upside down for all it got me.

Eventually I taught myself to read because after a few years in the first grade it got pretty nerve-racking and the tedium approached a kind of blank religious experience, while I sat there busy growing away from September until June when I was paroled for a few months from the first grade before returning to it again in the fall.

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I taught myself to read by figuring out what store signs and food products were saying. I would walk very slowly down the street and puzzle out SAM'S SHOE REPAIR, GOOD FOOD CAFE, AL'S SMOKE SHOP, FAST AND CLEAN LAUNDRY, NEON WAFFLE SHOP, ECONOMY MARKET, MABLE'S BEAUTY COLLEGE, and the ANTLER TAVERN where there were a lot of antlers in the front window and a lot more antlers inside.

People would sit around and drink beer and look at all the antlers while outside I studied menus in restaurant windows and slowly came to understand what the words steak, mashed potatoes, hamburger, salad and butter meant.

Sometimes I would go to a grocery store to study English. I would walk up and down the aisles reading the labels off cans. There were pictures on the cans which helped a lot. I would look at the picture of some peas on a can and read the word peas and put it together. I would hang around the canned fruit section and learn peaches, cherries, plums, pears, oranges, and pineapple. I learned my fruits very quickly after I had made the big decision that I wanted out of the first grade.

The most difficulty I had in learning my fruits was of course fruit cocktail.

Sometimes I would just stand there holding a can in my hands, staring at it for ten or fifteen minutes, getting no closer to the truth.

That was thirty-seven years ago and my reading habits since then have bobbed up and down like a cork on a roller coaster horizon. Right now one of my favorite things to read is the **National Enquirer**. I am a real fan. I like stories about people and there are a lot of stories about people in the **National Enquirer**. This week's **Enquirer** had articles with titles like these:

Food Causes Most Marriage Problems,
Short People Live Longer,
We Were Taken to a Mysterious City
in an Alien World,
Why President Truman Always Washed
His Own Underwear,
Angry Drivers Using Cars as Deadly Weapons,
"Lois Lane" Fumes Over Topless Photo,
Professors Wasting Your Tax $$
To Study Crickets

I started reading the **National Enquirer** by originally reading the **Sunday New York Times** while I watched television. It was actually quite simple: One day I just substituted the **National Enquirer** for the **New York Times**, and that was that.

I let somebody else buy my copy of the **Sunday New York Times** instead of me. They could have my copy and the responsibility for being a thinking and aware person. I am forty-four years old and thank God, I got out of the first grade and sometimes all I want to do is have a little mindless fun with the years that are left in my life.

I am happy as a clam reading the **National Enquirer** while watching television.

WILLIAM BURROUGHS

Writer; author of Junkie, Naked Lunch, The Ticket That Exploded, The Last Words of Dutch Schultz

Time ($31/yr., 52 issues), **Newsweek** ($29.95/yr., 52 issues), and local papers.

Rolling Stone ($18/yr., 26 issues) and **Village Voice** ($18/yr., 52 issues)

High Times ($10/yr., 8 issues)

Heavy Metal ($18/yr., 12 issues)

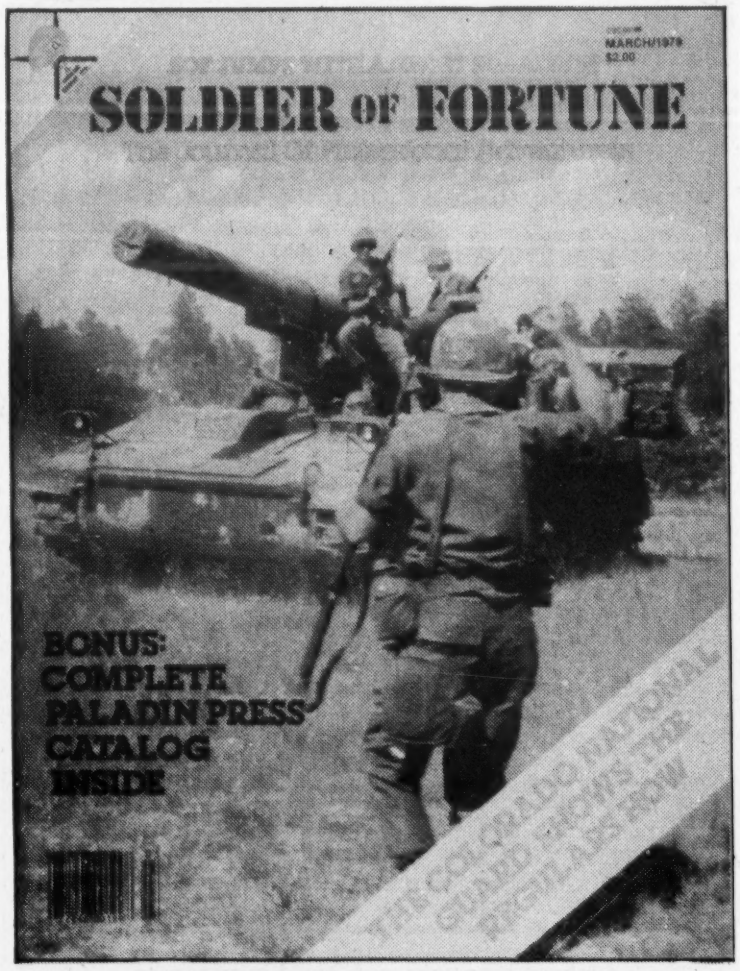
Soldier of Fortune ($18/yr., 12 issues)

The American Handgunner ($9.95/yr., 6 issues)

Life ($18/yr., 12 issues)

Boulder

New Times (ceased publication)



William Burroughs reads Soldier of Fortune: Journal of Professional Adventurers.

BOB CALLAHAN

Ethno-literary scholar; founder, publisher, editor, Turtle Island Foundation

The Interamerican

Free (6 issues)

The concern of this fine newsletter is the inter-related fields of anthropology, ethnology, ethno-botany and especially archaeology, and the range of information as broadly cast, and eccentric, as ever you are liable to find. The editor, Carl B. Compton, is a most curious man.

United Artists

A very fresh, and well-edited poetry magazine. The emphasis is on so-called "New York School" poets, but that term is misleading as each of the authors regularly featured has mastered his or her own particular and unique writing style.

Anthropological Journal of Canada

$8/yr. (4 issues)

In his initial statement of intent for this journal the editor, Thomas E. Lee, has written: "It is anticipated that this journal will publish certain articles that may be controversial." A dramatic understatement, really, as over the years this is where the "outlaws" of anthropology have tended to gather, creating, on balance, the most interesting and provocative anthropological journal in the field.

Y'Bird

$9/yr. (2 issues)

The best multi-cultural literary magazine in the country devoted, with remarkably little rancor, to pluralism and diversity in American Literature and the Arts.

CoEvolution Quarterly

$12/yr. (4 issues)

The editor's tastes tend at times to be scattered and uneven (and the associate editor's moralisms, at times, downright preachy) but this journal still remains the best roadmap towards an alternate, and more humane, society — and besides, we have been on this road too long to trade in our boffing equipment now. Bonus: new work by R. Crumb and Dan O'Neill in almost every issue.

City Miner

$2.75/yr. (4 issues)

A quarterly magazine of Bay Area "underground" culture which significance certainly extends beyond the boundaries of northern California. Past issues have featured long and in-depth interviews with Lawrence Ferlinghetti, Peter Berg, Robert Anton Wilson, Ernest Callenbach and Ishmael Reed.

The New World Journal

$5/yr. (2 issues)

The **New World Journal** features the work of contemporary writers who are attempting to measure the impact of the new learning — archaeology, mythology, ethnography and ethnobotany — upon their own work, and upon American culture as a whole.

Coda

$12/yr. (10 issues)

Although my Canadian friends say the coverage slights contemporary Canadian players (and I am inclined to agree as I didn't know a thing about Canadian players until my friends mentioned this fact, even though I do read this magazine), I still think **Coda** among the very best Jazz magazines of our time — intelligent writing about America's one true classical musical form.

New Wilderness Letter

$10/yr. (6 issues)

During the Sixties, in works such as **Technicians of the Sacred**, **Revolution of the Word**, and (with George

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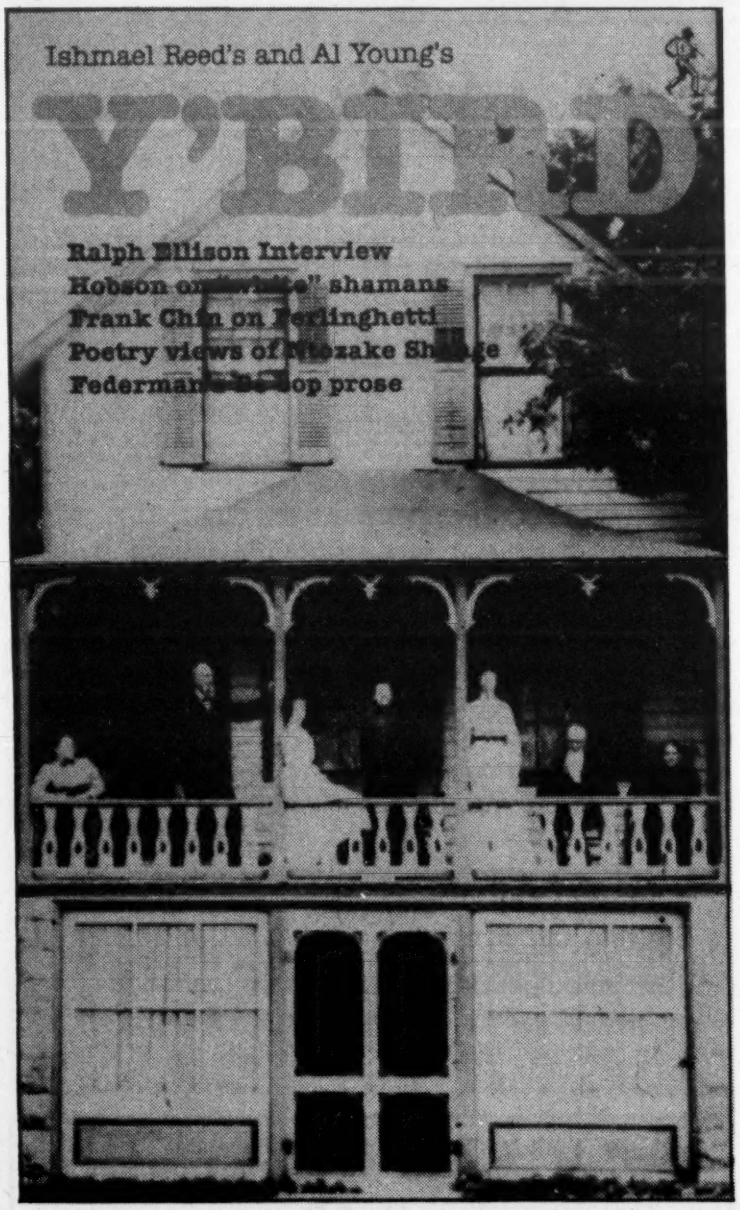


Bob Callahan and Gurney Norman read **Y'Bird**.

Quasha) **America: A Prophecy**, Jerome Rothenberg became perhaps the most important editor of American hermetic, radical and tribal poetries, and his anthologies became road maps to much of what was fresh and new about that decade. Well, Mister Rothenberg is still working in the grain of this essential heritage, and you can find his most recent reports and discoveries in the **New Wilderness Letter**.

The American Book Review
$4/yr. (6 issues)

The *only* credible national book review which is not either a mouthpiece for America's commercial publishing empire (the same people who gave you the Nielsen ratings, boys and girls), or a forum for Columbia and NYU professors who are attempting to climb on some already established writer's back to advance their own careers. Extensive reviews of America's independent presses.

Planet Drum
$10/yr. (4 issues)

Not a magazine, really, but a "bundle" of articles, essays, poems and documents which help to bring the cultural and natural integrity of a given American region into focus. Very smart stuff, really, and the recent bundle on the "Rockies" is just terrific.

Sport Magazine
$5.95/yr. (12 issues)

Old Sport. And here I must come clean. Much against the concerned advice of many good friends I have remained a sports junkie even through the old acid days, and I wish I could say frisbee or jogging but I can't – I'm talking pool tables, and the daily boxscores from the NBA and NFL. **Sport Magazine** ain't much, I guess, but it is the only magazine I would dare to read either before or during breakfast, and that is saying something (and yes I often also feast on Wheaties).

ERNEST CALLENBACH

Writer, editor; author of Ecotopia, *editor of* Film Quarterly

Science
$65/yr. (52 issues)

A lot of ideas for **Ecotopia** came directly or indirectly from it – the only magazine I read every week.

Seriatim
$9/yr. (4 issues)

The gang of shoestring Ecotopians over there in El Cerrito put out a handsome quarterly that always teaches me something, as with that marvelous story on the starch-particle-filled biodegradable plastics.

Ms.
$10/yr. (12 issues)

I regard the feminist movement as the most radical force in contemporary America, and try to keep up with it.

Working Papers for a New Society
$10/yr. (4 issues)

Well-researched articles, seldom as programmatic as I'd like, but something useful in each issue.

CoEvolution Quarterly
$12/yr. (4 issues)

I put it here in the middle of the list to confuse you. Don't quit – evolve!

Not Man Apart ($10/yr., 6 issues), **Environmental Action** ($15/yr., 12 issues), and **Natural Resources Defense Council Newsletter** ($15/yr., 4 issues), fall together as enormously informative ecological-movement news sources. The struggle is by now so large and complex that it's impossible for any one publication to survey it completely. I find I have to read all of these.

Socialist Review
$15/yr. (6 issues)

Probably the most intellectually innovative scholarly-Marxist journal around.

In These Times
$17.50/yr. (52 issues)

Intelligent, lively, pleasantly unsectarian radical newspaper – out of Chicago, which reminds you what the rest of the country is like.

Cascade
$10/yr. (10 issues)

(From Eugene, by the Cascade Area Regional Library, or somesuch name – everybody calls it CAREL. I

don't have a copy to hand, having just moved.) This has become an Ecotopian news bulletin, and also includes good articles.

Then there are a couple I read regularly for **Film Quarterly** ($7/yr., 4 issues) purposes, among a lot I read occasionally:

L'Ecran
$28/yr. (12 issues)

Paris is still in some ways the center of the international film world, so this incredibly catholic journal has more information in it than any other film-publication, and some decent if sketchy criticism.

New Yorker
$24/yr. (52 issues)

I grudgingly subscribe to this to keep up with Pauline Kael, and because there are occasional solid articles wedged in among the fur-coat and Lincoln Continental ads.

JACK CARROLL

Saddlemaker, McNeal, Arizona

My list is so scanty and non-exotic I can't imagine anyone having an interest in it. As I once ran a newspaper I buy **Reader's Digest**, **Newsweek** and read them with a cynical eye for the propaganda content. We get most of the horse publications because we advertise in them. Add the **Tucson Citizen**, which uses cutesy-poo essays to bulk out the scanty news, these written in the main by fresh-out-of-college kids who escaped the disciplines of grammar while ignoring the rules of spelling, too, and understand the literary wasteland that is Arizona.

The horse publications are filled with junior copyists who have read another idiot who did not understand his subject.

Thanks anyway, Stewart, but I am a pretty dull fellow anyhow. I will send in another article soon that shows how far the high Kinkajous of the horse world have strayed from the truths of the old cowboys. May be good poop for the Back-To-The-Soilers.

R. CRUMB

Cartoonist; Zap comics, Fritz the Cat, Mr. Natural, Carload O' Comics

I love to look at 'zines, all kinds . . . I've always been an avid reader of 'zines . . . they are a good way to catch the pulse-beat of the culture and, being into "graphics" myself, I like to study the visuals. I also dig around in second-hand magazine stores, a gold-mine of American cultural history. In McDonald's (Tenderloin, San Francisco) upstairs in the back there's a big stack of police and F.B.I. 'zines that make for interesting study, and I recently purchased a stack of "parties" magazine from 1929-30 which reflect the absurdities of middle class and college "fun" from that period. Some of the greatest old magazines are the photo-journalist, large-format, low-budget imitations of **Life** and **Look** from the late thirties, with titles like **Click, Pic, Spot**, etc. . . . I wish we had 'zines today that reflected American life as vividly and in such a raw, hard-hitting style. . . .

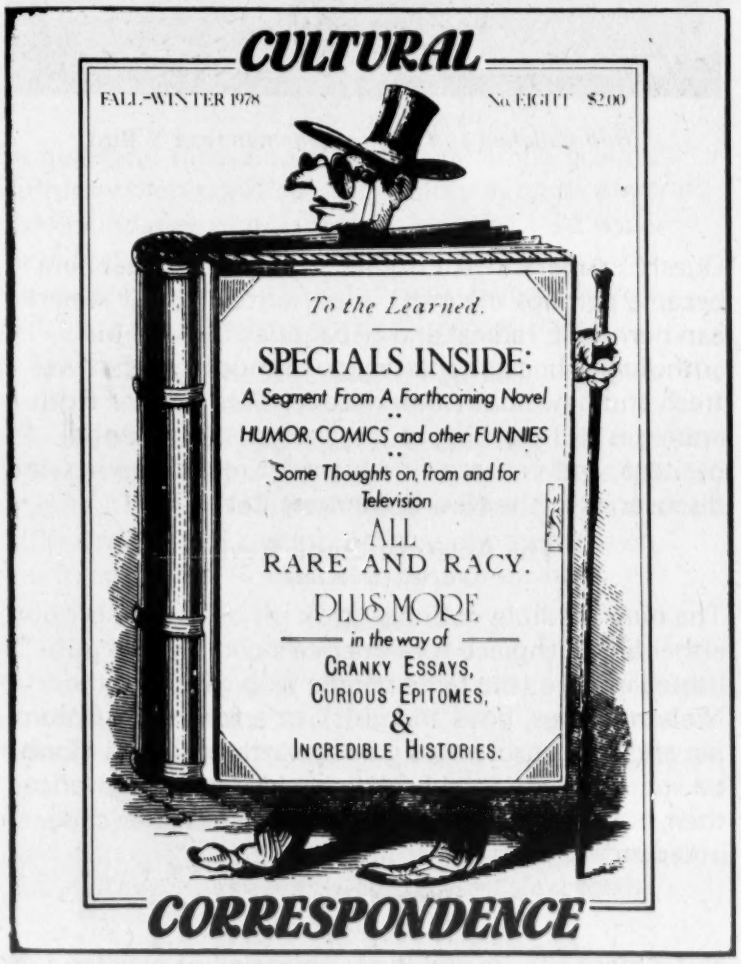
I am no better than the most down-and-out junkie. If I see a magazine, I head for it.

— John Todd

The only magazines I read with regularity are ones I get free in the mail. . . these include **CoEvolution Quarterly**, my favorite . . . I love its catalog-almanac format, packed with tidbits you can pore over for weeks . . . I never read it from front to back, but flip through its pages, catching random bits, until, by a process of elimination, I've read almost everything in it . . .

Cultural Correspondence ($5/yr., 4 issues) is a good left-wing 'zine which focuses on art, popular and otherwise, with good articles on TV, comics, popular music, and so forth . . . in it you can learn about the history of polka music in immigrant America, the Yiddish theatre, the history of Jewish comedians, stuff like that . . . it comes out kinda irregular, but worth waiting for . . . their main drawback is the typesetting and proofreading is kinda sloppy.

Another one I get in the mail that's a great little local newspaper of exceptional vision is the **Fox River**



R. Crumb reads **Cultural Correspondence**

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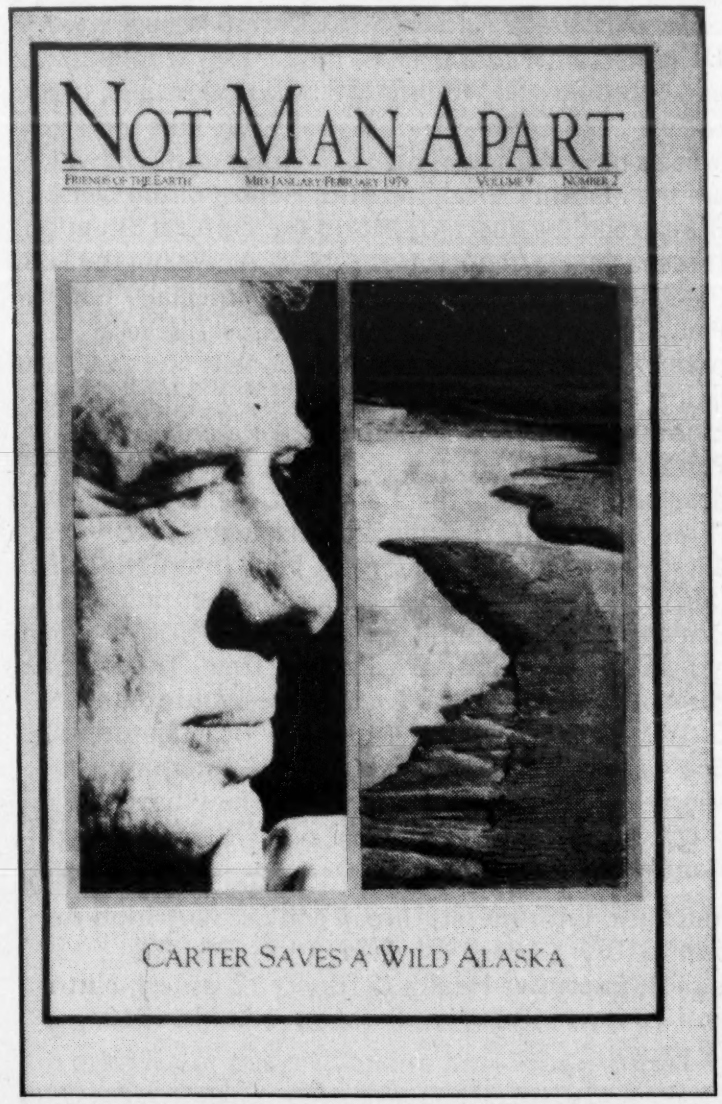


Not Man Apart, *published by Friends of the Earth, is read by Raymond Dasmann, Gary Snyder, Ernest Callenbach, James Parsons, Ian Ballantine, Anne Ehrlich and Paul Ehrlich.*

Patriot from Princeton, Wisconsin. Comes out bi-weekly, I think . . . reading the **Fox River Patriot** makes me want to move to Wisconsin . . . It's full of helpful farming and gardening information, local history and old photographs of local towns and old factories, and great articles about local old-timers who have "stuck to their guns" and kept the old ways alive, old craftsmen, small farmers and shopkeepers . . . they ran a series on small-town newspaper editors that was really interesting . . . They also run articles criticizing local ecological threats as well as publicizing local attempts to combat the forces of destruction . . . The best local rural-type paper I know of. Sorry I can't give you the address as I used the last edition to start my stove th' other day.

The only other publication I read with regularity is the **Village Voice** which they send me free every week since I used to work for it. I love to read about the rottenness and corruption of New York City, which the **Voice** constantly and patiently persists in uncovering . . . it is truly a bottomless pit, too . . .

That's about it . . . like I say, I sometimes buy some magazine just to study some aspect of modern America that I don't know anything about but is obviously popular enough to support its own magazines . . . Like f'rinstance, there are several 'zines devoted to vans, ones for dirt-bikers, skate-boarders . . . four or five 'zines are out now for runners 'n' joggers. . . . I check out the hunters' mags, the country-western music fanzines . . . there's always new style mags like **Vital**, really nauseating, but interesting, ag biz 'zines like **California Farmer** which they send out free to all the farmers and farm-related businesses in the valley, full of right-wing tirades against Govner Brown and the damned environmentalists, and big chemical company ads and farm equipment ads . . . Frightening . . . Then there are the new weird punk 'zines like **Search and Destroy**, kinda silly but some innovative graphics.

I hate **Playboy, Time, Mademoiselle, People,** and all the teen 'zines for the pernicious influence they have, but, I s'pose no magazine or newspaper is as bad as TV, which I almost never watch. . . .

Also, the **National Lampoon** is annoying and there are no good comic books put out by the mainstream publishers. And that's th' truth!

The same stupid public stuff continues to happen. I am not the first to believe that the real news is in the classics.

—Wendell Berry

RAYMOND DASMANN

Ecologist; author of **The Conservation Alternative, Ecological Principles for Economic Development, Destruction of California, African Game Ranching**

Science
$65/yr. (52 issues)

Didn't realize how much I depended on this journal until I was cut off from it for a time. **Science** helps keep me oriented in my efforts to travel the path between truth and fantasy. Although 60% of the material is too technical to be of interest, the other 40% is invaluable.

Bioscience
$32/yr. (12 issues)

The quality varies more from year to year but I find it essential to my work.

New Scientist
$54/yr. (52 issues)

Although infested with journalists who carry a bias toward what is *in* and what is *out* in the scientific world, I have relied on **NS** to keep me in touch with overseas viewpoints and information.

The New Ecologist
$9/yr. (6 issues)

The Ecologist Quarterly
$9/yr. (4 issues)

I have read most of every issue, along with the issues of the parent magazine, **The Ecologist**, for inspiration

as well as factual knowledge. The bias in these journals is the same as my own, so I must balance them with the more objective scientific reporting of the above three.

Resurgence
$10/yr. (6 issues)

Sub-titled "Journal of the Fourth World." I find **Resurgence** to be among the best of the alternative periodicals, although its coverage of American activities is inadequate.

Survival International Review

This is the most useful periodical I know for keeping up with what is happening to the endangered peoples and cultures of the world. For more detailed information about the Americas I supplement **SI** with **Akwesasne Notes** (Free, 5 issues), edited by the Mohawk Nation.

Not Man Apart
$10/yr. (6 issues)

I rely on FOE's newsletter more than any other single publication for U.S. environmental news.

ANNE EHRLICH

Biologist, co-author of **The End of Affluence** *and* **Ecoscience**

Like Paul's list, mine is topped by **The New Scientist** ($54/yr., 52 issues) and **Science** ($65/yr., 52 issues) as far and away the most useful sources of information for our activities. I would be hard put to say which is first and which second, and my reasons are essentially the same as Paul's. **The New Scientist** has the additional advantage that it is put together with a delightful sense of humor and style, which is unfortunately lacking in **Science** and most other "serious" scientific journals.

Somewhat below these two leaders in usefulness are a half-dozen or so journals that regularly provide information (and occasionally ideas) of considerable use to us. Without putting them in any particular order, these are the **Bulletin of the Atomic Scientists** ($18/yr., 10 issues), primarily for policy issues, the arms race, and energy and resources, **Environment** (for environmental issues), **The Ecologist** ($9/yr., 4 issues), the same, but broader and with a British perspective, **Scientific American** ($18/yr., 12 issues) with the reservations noted by Paul, **BioScience** ($32/yr., 12 issues) mainly policy issues and problems with a biological basis, and **People**, published by International Planned Parenthood Federation in London, for population issues and information.

In addition, there are a good many further journals that supply us with information, but are not quite as consistently useful as those listed above. These include **Ceres** ($45/yr., 6 issues) published by the UN's Food and Agriculture Organization on the food situation, numerous journals of environmental organizations, especially **Not Man Apart** ($10/yr., 6 issues) by Friends of the Earth; then **The Sierra Club Bulletin** $8/yr., 6 issues), **Audubon** ($13/yr., 6 issues), **Defenders of Wildlife News**, the **Conservation Bulletin** and **International Wildlife** ($8.50/yr., 6 issues), plus a couple from England and Australia. We take some periodicals from the government, the most useful of which are the **Monthly Vital Statistics Report** of the Census Bureau and the quarterly **World Agricultural Situation** (Free, 3 issues), reports from U.S.D.A. We use the U.S. Planned Parenthood's publications, especially **Family Planning Perspectives** ($25/yr., 6 issues); several publications of the Population Council; and the Population Reference Bureau's publications, especially the monthly **Population Bulletin**. Their annual **World Population Data Sheet** is absolutely essential. On development issues, there are the **Development Forum** (Free, 12 issues) from the UN, **Mazingira** ($10/yr., 4 issues – a new magazine), the **New Internationalist** ($9/yr., 12 issues), rather Marxist in orientation, and British, and AID's publication, the new title of which has slipped my mind. We also tap **Time, The Sciences, Human Nature, Natural History, CoEvolution Quarterly, American Scientist, American Naturalist, Ecology, Demography**, and recently, **International Migration Review**. The most useful newspaper of course is the **New York Times**, and we also use the **Wall Street Journal**.

In addition, for myself, I read and use **Nutrition Action** ($10/yr., 12 issues), **Prevention** ($6.85/yr., 12 issues), **Executive Health** ($18/yr., 12 issues), **Nutrition Today** ($13.50/yr., 6 issues), and **Ms.** ($10/yr., 12 issues).

New Scientist, *from England, reviewed by Anne Ehrlich, Paul Ehrlich, William Irwin Thompson, Peter Warshall, Philip Stewart, Raymond Dasmann, Witold Rybczynski, Stewart Brand, James Lovelock, and Robert Ornstein.*

PAUL EHRLICH

Population biologist, author of Population Bomb, *co-author of* The End of Affluence *and* Ecoscience

New Scientist
$54/yr. (52 issues)

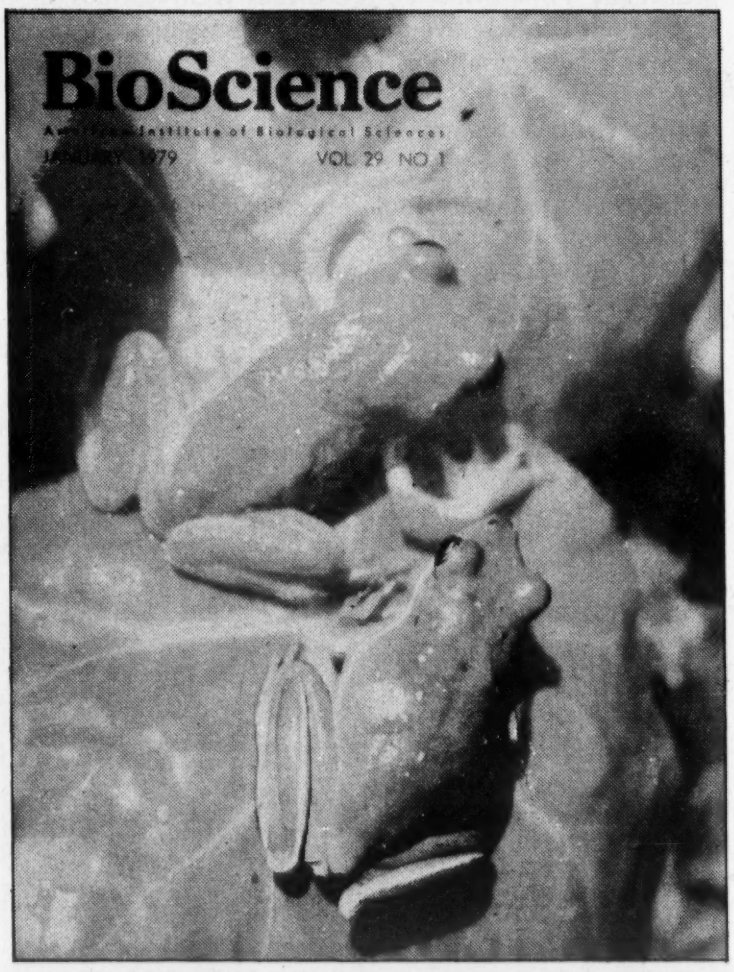
This is the most useful journal I read – diverse, interesting coverage with articles of a reasonable length for a generalist interested in keeping up with science. Coverage of the sciences is well balanced and book reviews are useful. It is just the opposite of the **Scientific American** ($18/yr., 12 issues), which has long, cumbersome articles that have been edited to read as if they were all written by the same not-too-bright computer. Only plus of **SA** on the "social responsibility" side is fine coverage of nuclear weapons issues. **SA** is unbalanced towards "hard" sciences; coverage of population and related problems could have been edited by Pope Paul. Book reviews are comprehensive, intelligent, but mostly of books of interest primarily to the authors' families.

Science
$65/yr. (52 issues)

Essential for any American scientist for news, comments, and book reviews, as well as a sprinkling of interesting technical articles each week. I wish we could afford to subscribe to its British counterpart, **Nature** ($165/yr., 52 issues), also.

Human Nature
$15/yr. (12 issues)

I'm involved in this one, and so am probably prejudiced, but I think it has superb coverage of the human side of the sciences.



Raymond Dasmann, Anne Ehrlich and Paul Ehrlich read **Bioscience**, *journal of the American Institute of Biological Sciences.*

Mother Earth News
$12/yr. (6 issues)

I have a library of this one – it is a nearly timeless source of ideas on technological alternatives.

Bulletin of the Atomic Scientists
$18/yr. (10 issues)

Great for policy discussions, especially in nuclear power and related areas.

American Naturalist
$22/yr. (6 issues)

This is probably the most useful of the technical journals in my field; others include **Evolution** ($25/yr., 4 issues), **Ecology** ($30/yr., 6 issues), **Oecologia** ($313/yr., 16 issues), **Journal of Ecology** ($105/yr., 3 issues), **Journal of Applied Ecology** ($105/yr., 3 issues), **Genetics** ($35/yr., 12 issues) and **Heredity** ($43/yr., 6 issues).

American Scientist
$15/yr. (6 issues)

This is second only to **Science** as a broad-coverage American science journal.

Bio Science
$32/yr. (12 issues)

Best broad coverage of biology.

Quarterly Review of Biology
$15/yr. (4 issues)

Excellent for its comprehensive book review section.

The Ecologist
$9/yr. (4 issues)

The best of the popular environment magazines.

Not Man Apart
$10/yr. (6 issues)

The fine "newspaper" of Friends of the Earth – a good place to keep up on environmental activism.

Time
$31/yr. (52 issues)

Essential for me as the best index of current popular prejudices and misconceptions. Can usually be read in 10 minutes, sometimes useful for news information that I didn't catch on TV or in a newspaper. **Newsweek** ($29.95/yr., 52 issues) could serve the same purpose.

Penthouse
$20/yr. (12 issues)

Rarely is there an issue without at least one very interesting article; illustrations are much better than either **New Scientist** or **Scientific American**.

ALLEN GINSBERG

Poet; author of Howl & Other Poems, Empty Mirror, Kaddish & Other Poems, Reality Sandwiches, Poems All Over the Place, Allen Verbatim

Re Periodicals I value & use: no value attached to the order below.

New York Times
$150/yr. (365 issues)

Washington Post
$159.50/yr. (365 issues)

For years I clipped out everything on DOPE & CIA

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from **NY Times**, lots of background detail generally buried at end of stories or obliquely stated in Aesopian Language, as per Seymour Hersch's coverage of Cord Meyer's attempt to influence Harper & Row not to publish an exposure of CIA Dope Trafficking in S.E. Asia in Al McCoy's book **The Politics of Heroin in Indochina**. Hersch quoted an unnamed CIA hand (subsequently understood to be Col. Lucien Conein) as affirming that the book's burden was essentially true. The story itself was never explored by aboveground media, but between the lines, or referentially, acknowledgment was there, if you understood what the whole story was about to begin with. So I read these papers whenever I have time, for general information; also to find out what the establishment CIA party line is, since editors & reporters of these papers do have cocktails with CIA chiefs all the time, cooperate with CIA in varying degrees, and will, in a crisis, fail to find a smoking pistol or cooperate in hiding one of CIA's smoking pistols at moments crucial to public consciousness, such as CIA overthrow of Iran's Mossadeq reported by **Times** man Kenny Love but killed as story, or CIA Guatemala government 1953 overthrow, or CIA involvement with Mafia & opiate trafficking (a story denied by old CIA hand C.L. Sulzberger in its day the early seventies and subsequently acknowledged by him in private letter after his retirement)

Time
$31/yr. (52 issues)

Newsweek
$29.95/yr. (52 issues)

I read these generally on airplanes, occasionally to find out "News," but more to examine capitalist police bureaucracy party line on the news — i.e., how much will be acknowledged of what the pragmatic intelligentsia already knows from direct experience or from what's reported in underground press.

Distant Drummer

Georgia Strait
$5/yr. (26 issues)

These underground newspapers still are kind enough to send me free subscriptions so I depend on them for **Liberation News Service** (free, 52 issues), and other "underground" reportage of everything the Bourgeois media doesn't report — advance notice of new discoveries in Assassination Conspiracy detail, reports on multinational corporation atrocities & Chicanery, info on FBI plots, Narcotics Bureau police-state-type activities, Trilateral Commission connections to Carter, ecological distant early warning signals, news of local literary censorship & dope busts, Gay lib news, etc. I read a smattering of underground newspapers — those that have survived the Cointel-Pro FBI 1968-72 sabotage and harrassment which affected 60% of such media according to info gathered for a PEN Club FreedomTo Write Committee report — wherever I find them, travelling universities to read poetry.

Gay Sunshine
$10/yr. (8 issues)

Fag Rag
$7/yr. (10 issues)

Winston Leyland's **Gay Sunshine** is one of the best edited literary journals in America; tho its emphasis is on homosexual literature, its interviews, and literary historical research pieces (such as the Russian hero Poet Sergei Yessenin's flower-power return-to-the-land peasant rough trade turn-of-century liason with his poetry teacher lover Kluiev) are extraordinarily sensitive and informative re what's going on behind the scenes mentally. Lots of pre & post Victorian news gaps get filled in. **Fag Rag** similarly deals with present history & letters in Boston, & elsewhere.

W.I.N. (Workshop In Nonviolence)
$15/yr. (44 issues)

Liberation
$12/yr. (10 issues)

Seven Days
$15.60/yr. (26 issues)

The above three magazines carry news and essays from point of view of "Movement" folk with roots back to WW I, Catholic Worker, Anarchist Pacifist, Quaker, Bohemian Protest, Thoreauvian-Gandhian-American tradition. **W.I.N.**, edited for youthful political seekers, did the giant MEDIA PAPERS expose which ended the FBI's overt Cointel-Program. **Liberation** featured Paul Goodman for years, & I see David MacReynold's activities (he being an old hand at organizing movements of conscience) there. David Dellinger helps edit **Seven Days** as a post-movement alternative to **Time/Newsweek**. With a combine of **Newsweek** (I won't say **Time** since it's too directly CIA Chauvinist) and **Seven Days** I have gotten a wide spectrum of view and fact, when I've read both. I skim all above. I have a close friend who's an old hand editor on national wire service. Despite my left bias, he acknowledges that over the years my inside advance information on Dirty Politics has scooped the wire services in many areas of cultural importance. Most of that info comes from skimming underground press, **W.I.N.**, **Liberation**, and more recently **Seven Days**.

Steelers Hold Off Cowboys to Win Super Bowl, 35-31—D1
The Washington Post
Khomeini Claims Iran's Revolution Has Only Begun

Allen Ginsberg, William Sturtevant and Alice Tepper Marlin read The Washington Post

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Village Voice
$18/yr. (52 issues)

Soho News
$11/yr. (52 issues)

I live in Lower East Side NY & despite dislike of the ageist shitbrain cultural stupidity of the **Voice** (such as its seven-headed attack on Dylan's extraordinary movie **Renaldo & Clara**) and its Karma & ownership by an australian Newsmonster Tycoon, there is still Poetry & politics news that attracts me whenever I see it on kitchen table in NY. **Soho News** more locally gossippy has some art information but's too sloppy to depend on.

Rolling Stone
$18/yr. (26 issues)

Melody Maker
$9.50/yr. (52 issues)

Members of my household play in Rocknroll bands, I tried my own hand at Blues recording, so I'm curious about musical gossip. **Rolling Stone** will have great political articles a few times a year – investigations of mafia-dope-narc-CIA-FBI-Nuclear underworlds.

St. Mark's Poetry Project
Monthly Newsletter
$2/yr. (12 issues)

NY poetry world gossip, reviews, community notes, listings of poetry readings, informed detail on comings and goings of poets & books around NY. **Poetry Flash** out of San Francisco does somewhat same for Bay Area, tho their reviews of readings are often jejune.

Allen Ginsberg reads Melody Maker, *British weekly music magazine.*

Angel Hair mag & books, **My Mag**, **Roof**, (all NY) and **Bombay Gin** (Boulder) among others are present-day mimeo'd literary poetry magazine series in which work of younger & older writers *purely literary noncommercial avant garde* present their experiments. Surveillance of these is maintained by above **St. Mark's Poetry Project Newsletter**, giving survey of contents, addresses and prices.

Zap/Crumb Comix – whenever Crumb's work appears his honest individualist takes are Decade News, & cartoon my own insights, or "give permission" to my own perceptions, of cultural mores.

Dial-A-Poem Poets, c/o John Giorno, 222 Bowery, New York, NY 10003 – an "oral magazine" where you can hear yearly voices of Burroughs, Leroi Jones, Peter Orlovsky, Anne Waldman, old and young poets, Frank O'Hara dead, Helen Adam, Ned Sanders, Michael Lally, Ron Padgett, Robert Lowell, Patti Smith, Joel Oppenheimer, Jackie Curtis, Taylor Mead, nearly everybody involved with modern open-form vocalizable poetic art, dozens more.

Little Caesar Press, & Mag ($4/yr., 4 issues). Excellent specialized poetry mag begun years ago as "punk poetry zine" now matured & varied much, ed Dennis Cooper a remarkable poet.

Nada Press ($1 per issue). Irregular mimeographed poetry/prose slim chapbooks & magazines containing work assembled by editor Cope. His own pamphlets of Poetry in objective mode or W.C. Williams & C. Reznikoff are among the best poetic writings in USA. As Nada Press is totally personal, mimeographed and unpriced, & issued only on occasion of accumulation of rare materials, it could not bear much larger readership in present publication form.

I read occasionally the traditional literary magazines and journals, **Partisan Review, Hudson Review, Chicago Review, NY Review of Books, Northeast Rising Sun, Paris Review, Poetry** (Chicago), **NY Times Book Review, Times Lit. Sup.**, & enjoy odd bits, & reviews, but rarely find righteous poetry or prose invention.

I read **Unspeakable Visions of Individual** & **Moody Street Irregulars** for specialized commentary & documenti on Beat writing & Kerouac.

I read **City Lights Journal** for continuation of old-fashioned Bohemian individualist tradition, work by my '50s confreres in Bay Area, & City Lights eye for flotsam & jetsam provincial genius or Europe Nostalgia.

I read **Wind Bell** and **Loka** or whatever other journal paper or magazine emerges from Boulder Naropa/ Buddhist/Poetics scene (such as **Talking Poetics**, Annals of Jack Kerouac School of Disembodied Poetics Vol I, Shambala Press, Boulder; **Bombay Gin** mimeo mag & Naropa, 1111 Pearl St., Boulder, CO, $2/issue) to find out what's going on in Buddhist home territory.

I read local newspapers wherever I travel for local news, especially red squads, narc corruption & chutzpah, environmental detail, farm conditions, culture takes. This includes commercial throw-aways, Pennysavers (pastoral want-ads & bargains).

I read **U.S. News & World Report, Forbes, Fortune,**

Wall St. Journal occasionally or skim on airplanes which I ride frequently enough to check out the above a few times a year. Also **Scientific American** in the sky.

The above inventory covers what I actually read, skim, or use often (or occasionally as noted), and is not recommended as an eye diet for anyone else; I often dislike my own reading habits & quit reading the entire mass above for months or years at a time. The list covers only what I can remember at typewriter in Boulder away from library files in NYC.

January 18, 1979

I often dislike my own reading habits and quit reading [periodicals] for months or years at a time.

— Allen Ginsberg

ALEX GREY

Artist; "Polar Unity," devisor of Mind Folds

Re-Vision
$15/yr. (2 issues)

Subtitled "A Journal of Knowledge and Consciousness," **Re-Vision** contains concise and illuminating interviews with and articles by heavy-weights on the forefront of brain/mind research and "the perennial wisdom." I like it for making some very abstract notions understandable.

Energy and Character
$8/yr. (3 issues)

Journal containing scholarly texts by doctors and others who sympathize with the bio-energetic research of Wilhelm Reich. Unites ancient and modern healing methods, life energy concepts, consciousness research, and social criticism. It makes me feel that Reich is still alive and thinking.

CoEvolution Quarterly
$12/yr. (4 issues)

Containing articles by people willing to speak the truth, and outstanding leaders in every field, this is a magazine that runs the entire gamut of useful information. Thoughtful and outrageous cartoons, reviews of books and tools, and NO ADS. Because of its variety and selection of topics, I read most every article in **CQ**.

Art in America
$19.95/yr. (6 issues)

I like it because of the big color pictures. Very readable art criticism on past and contemporary artists, but not daring in the least.

Newsweek
$29.95/yr. (52 issues)

The best color photographs and decent reporting of critical world events. Newsweek condenses popular news into a clear albeit conservative chunk.

TV Guide
$15.50/yr. (52 issues)

We renew our subscription every year. It informs us of the best in video entertainment and education, and occasionally the cover illustrations are great.

New Age
$12/yr. (12 issues)

A popular review of shifting attitudes and issues of the "New Age." Sex, death, ecology, holistic medicine, spiritual disciplines . . . these are some of the themes that are covered.

Child's IQ growth not 'neat, tidy,' psychologist says

BRAIN / MIND bulletin — FRONTIERS OF RESEARCH, THEORY AND PRACTICE

A psychologist has challenged the idea that the mental development of children is stable and consistent over time.

The "neat and tidy" view of current developmental psychology does not account for the transitions in the growth of a child's mind and its potential, Robert McCall of Boys Town (Neb.) said. Emphasis on the rapid growth of intelligence during the early years has blinded psychologists to what happens during later childhood and adolescence, he added.

The correlation between a youngster's IQ at age 4 and his IQ a: 17 is about 70 per cent, but that does not take into account the continuous potential for change.

"This approach is like predicting a 10-foot difference in the heights of mature sequoia trees from seedlings," McCall said, "while ignoring the fact that all the trees grow to be over 300 feet tall."

McCall proposed a new model for the intellectual development of the child, "a new way of thinking about these issues." Research indicates that *both* genetic and environmental differences become more profound with age. "Is intelligence becoming both more genetic and environmental at the same time?"

He suggested that intelligence is *canalized*, a concept borrowed from C. H. Waddington. "Canalization implies a species-typical path . . . along which nearly all members of the species tend to develop." However, the appropriate environment for that species must predominate if there is to be the proper unfolding of its typical development. If the environment goes awry, so does development.

At the start, mental development in human infants is "highly canalized," with a strong tendency for it to right itself if something goes wrong. But it becomes progressively less canalized after 18-24 months.

Paradoxically, it is now more vulnerable to "developmental winds," buffeting by the environment and favorable influences. There is greater *potential* for developmental change. But when the self-righting tendency weakens, individual *differences* become more stable, too. McCall warned that this apparent stability should not mislead psychologists into thinking that change is impossible.

Continued on Page 2

New role seen for hippocampus

Longterm memory storage may rely on connections, not individual cells

The hippocampus—a structure deep within the brain's temporal lobe—seems to be essential to longterm memory. Damage to the hippocampal formation, or surgical removal of the hippocampus, has resulted in a profound disability in some individuals. They cannot remember anything new for more than a few minutes and are left with only the memories they had before the surgery or trauma.

It has been assumed that the hippocampus consolidates learning—transfers information into longterm memory. *How* such consolidation occurs is not understood.

Now research at UCLA, using electrodes implanted in the hippocampus and amygdala of human subjects, has recorded the activity of single cells. *No single cells were found that responded specifically to recent memory.*

The research took advantage of the implanting of such electrodes in psychomotor epileptics scheduled for therapeutic surgery. The subjects watched slides. Single neurons responded to changes in illumination as the slides went off and on. They also fired when the individual had to make a behavioral choice based on the slides.

A few cells increased their rate of firing when a recent memory was elicited in an informal interview, rather than the formal test. These cells were not in the hippocampus but in an adjacent region, the hippocampal gyrus.

Eric Halgren and his co-workers speculated that this region does not contain the actual *information*, or specific memories, but interacts dynamically with the whole forebrain to elicit information distributed throughout the brain.

Their report appeared in *EEG Journal* 45 (5): 585-601. Halgren: Reed Neurological Research Center, UCLA, Los Angeles 90024.

* * *

A researcher at the State University of New York, like the UCLA group, blames the memory deficit on flawed connections.

Reviewing "the neuroanatomy of amnesia," James Horel marshalled evidence that temporal-lobe amnesia may not be due to a problem in the hippocampus itself but rather to damage to the fiber tracts connecting the temporal cortex and the amygdala to subcortical structures.

Horel's review is in *Brain* 101: 430-445. His address: Dept. of Anatomy, SUNY, Upstate Medical Center, Syracuse 13210.

Physostigmine increases REM sleep

First report of drug-induced dreams

The first evidence of drug-induced dreaming has been reported by researchers at the National Institute of Mental Health. Physostigmine, a drug that increases the action of the brain chemical acetylcholine, induces rapid-eye-movement sleep when administered to a sleeping subject.

Although REM sleep and dreaming are not identical, there is better recall from the highly charged REM state and the subject matter is usually more bizarre and 'dreamlike' than the thought processes recalled from non-REM sleep.

Seventeen volunteers were given the drug or a placebo intravenously after they had fallen asleep. They were then awakened during ensuing REM or non-REM periods. One group of subjects was awakened 20 minutes after the infusion. Those who had received physostigmine were far likelier to report dreams (89 per cent of the awakenings). The drug did not increase dream recall in the non-REM state.

These findings are consistent with the latest model of sleep, which postulates two brainstem areas that either facilitate or inhibit REM sleep in alternating cycles.

Acetylcholine seems to trigger the REM cycle by influencing the facilitory area of the brainstem.

Nattaj Sitaram and his colleagues reported their findings in the *Archives of General Psychiatry* 35: 1239-1243. His address: Unit on Sleep Studies, NIMH Bldg. 10, Room 3N-224, Bethesda, Md. 20014.

Alex Grey, Michael Murphy and Sam Keen read **Brain/Mind Bulletin: Frontiers of Research, Theory and Practice.**

Brain/Mind Bulletin
$15/yr. (26 issues)

B/M B gathers important psychological and neurophysiological research together from very diverse sources, providing inspiring cross references. I appreciate the variety and the choice of information covered.

Artforum
$22.50/yr. (10 issues)

I have read and cared about this magazine more in the past than now, but it still has some worthwhile reviews or articles about the shifting face of art today.

est, Graduate Review
Free (12 issues)

I like Werner, and the review publishes many enlightening and memorable articles about inspiring individuals, groups, and projects.

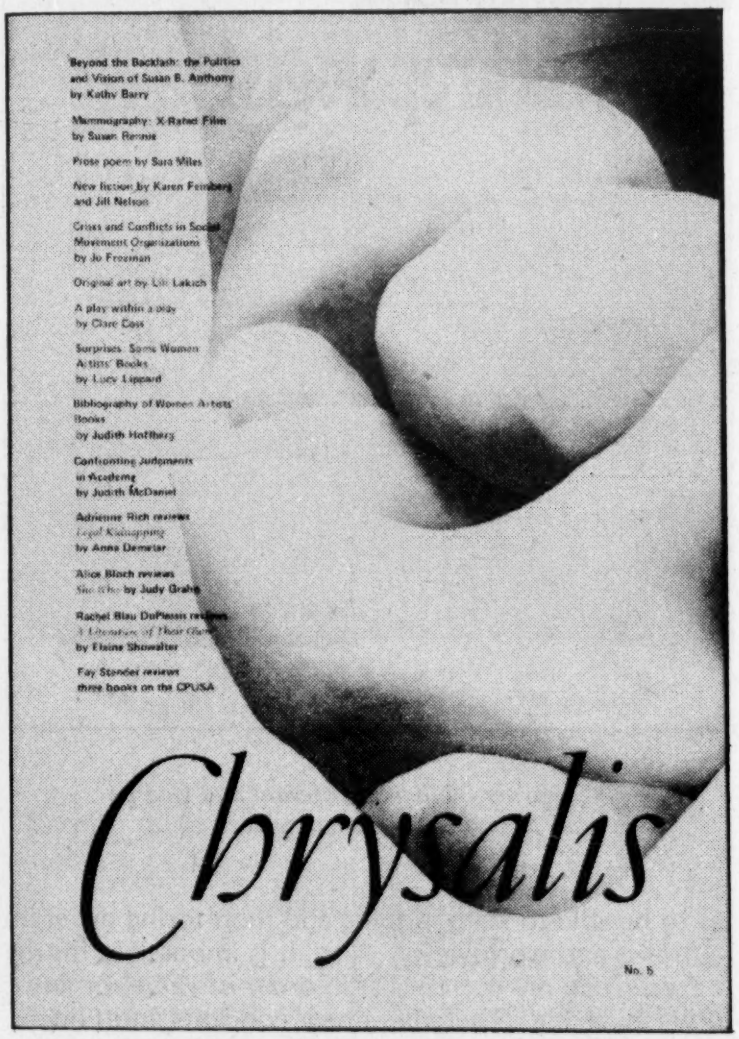
Manas
$10/yr. (44 issues)

Manas integrates the work of major thinkers on today's problems of the self and society, and it quotes one of my favorite philosophers, Ortega Y. Gassett. The newsletter presents ideas — not egos, leaving the names of the authors unpublished.

SUSAN GRIFFIN

Poet, feminist, author of Woman and Nature: The Roaring Inside Her

Signs ($15/yr., 4 issues), is a scholarly and academic journal which includes a broad spectrum of papers relevant to women's lives, in the fields of social science and the humanities. Its first issue with a now-famous article by Carroll Smith-Rosenberg, "The Female



Susan Griffin, Margo St. James, Anne Herbert, and Anne Waldman read **Chrysalis: A New Magazine of Women's Culture.**

World of Love & Ritual: Relations Between Women in Nineteenth-Century America," was wondrously full of deep thinking and revelation, both factual and theoretical. This journal, after the first issue, tends to be more academic than I would wish it for my purposes. But, even for my less institutional scholarly tastes, it is an invaluable source of information about what research is being done about and by women, and continually runs articles of enormous interest.

Chrysalis ($10/yr., 4 issues). I am a contributing editor to this publication and watched it being born, and am therefore very fond of it; I find it one of the best publications available anywhere. The magazine is devoted to woman's culture. It is designed by Sheila de Bretteville. The latest issue contains the last chapter of Mary Daly's latest book **Gyn/Ecology**, a long poem by Adrienne Rich, an article by the linguist, Julia Stanley and critic Susan L. Wolfe (Robbins), "Toward a Feminist Aesthetic," among many others. The magazine runs a catalogue of women's resources every month and a Double Crostic by Dorothy Riddle. It is a very beautiful and rich publication, with a wonderful spirit.

Sinister Wisdom ($4.50/yr., 3 issues). Aside from whole-hearted love for the title of this magazine, I thoroughly trust it. It is called "A Journal of words and pictures for the lesbian imagination in all women." And it *is* that. It publishes short fiction, essays and criticism. This magazine publishes writing on the edge of new form; it *is* almost an entire sensibility on the edge. One feels, reading it, the very pages in the act of *becoming*, and that is why one believes every word in it, and recognizes those words as one's own.

Conditions ($6.50/yr., 3 issues). This is a solid, carefully made journal with a format similar to **Sinister Wisdom,** publishing poetry, reviews, fiction, essays from, about, by, and around the Feminist movement. Both the reviews and the prose and poetry in the journal are reliably very good and always relevant to the most significant issues. It contains some of the best criticism and critical thinking to be found in any journal, anywhere, for example Barbara Smith's "Toward a Black Feminist Criticism," or Judith McDaniel writing of the poetry of Olga Brounas.

Heresies ($11/yr., 14 issues), is similar in format to **Chrysalis**: Large, beautifully designed, with the graphics as important as and integral as the text. But it has a slightly different editorial outlook and aesthetic than **Chrysalis**. For one thing, **Heresies** devotes each issue to a single topic. The last two issues, one devoted to Spirituality and the latest to Women and Violence have been spectacular, and will no doubt become invaluable resources in the future. Each issue is made by a different collective, and more than with the other publications, one is always aware, in reading it, of the process of editorial choice, and this is an intended part of the experience which I find valuable.

Isis ($10/yr., 4 issues). This magazine delights me because it is international and reports news and excerpts from womens publications from all over the world. Hence we see how other women do and do not think like we do, which conditions are global, and which, not our own, we must know more about. The latest issue is devoted to women in southern Africa.

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Those times when the black dog slips
in to bite and I do my Lord Jim,
only two things keep me steady.
Twelve cups of valerian root tea or
my bedside reading stand. . . .

— David Shetzline

MICHAEL HARNER

Anthropologist; author of The Jivaro *and* Hallucinogens and Shamanism

The New York Times

$150/yr. (365 issues)

To paraphrase Winston Churchill on another subject, **The New York Times** is the worst newspaper I know, except for all the others. When I lived on the West Coast I found it conservative, thorough, and depressing. Now that I live on the East Coast I find it conservative, thorough, and, unfortunately, approximating reality.

Science

$65/yr. (52 issues)

Current research results by scientists, for scientists, across the broad span of disciplines represented in the American Association for the Advancement of Science. A slight criticism would be that staff feature writers sometimes exceed their competence by passing judgments, at least implicitly, on scientists and scientific controversies.

American Anthropologist

$50/yr. (4 issues)

The main journal of the American Anthropological Association, it keeps one in touch with what is broadly happening, or not happening, in the discipline. The book and monograph reviews are numerous and often the most useful part.

Current Anthropology

$25/yr. (5 issues)

The international journal of anthropology. Its review articles are usually the best feature, especially since they are accompanied by critical comments from other specialists (anthropologists seem to love fights, at least in the safety of the printed page).

American Antiquity

$20/yr. (4 issues)

One should have some basic background in the archaeology of the New World to properly enjoy this periodical. For me, the opening of each issue is a delightful moment of suspense, for it usually contains reports on new finds, new dates, and new facts which to some slight degree alter my perception of the evolution of human culture.

Natural History

$10/yr. (10 issues)

The articles and photographs remind one of the interrelatedness of life on the planet, and often represent the results of recent research. The written material is typically clear, interesting, and designed for an educated public.

CoEvolution Quarterly

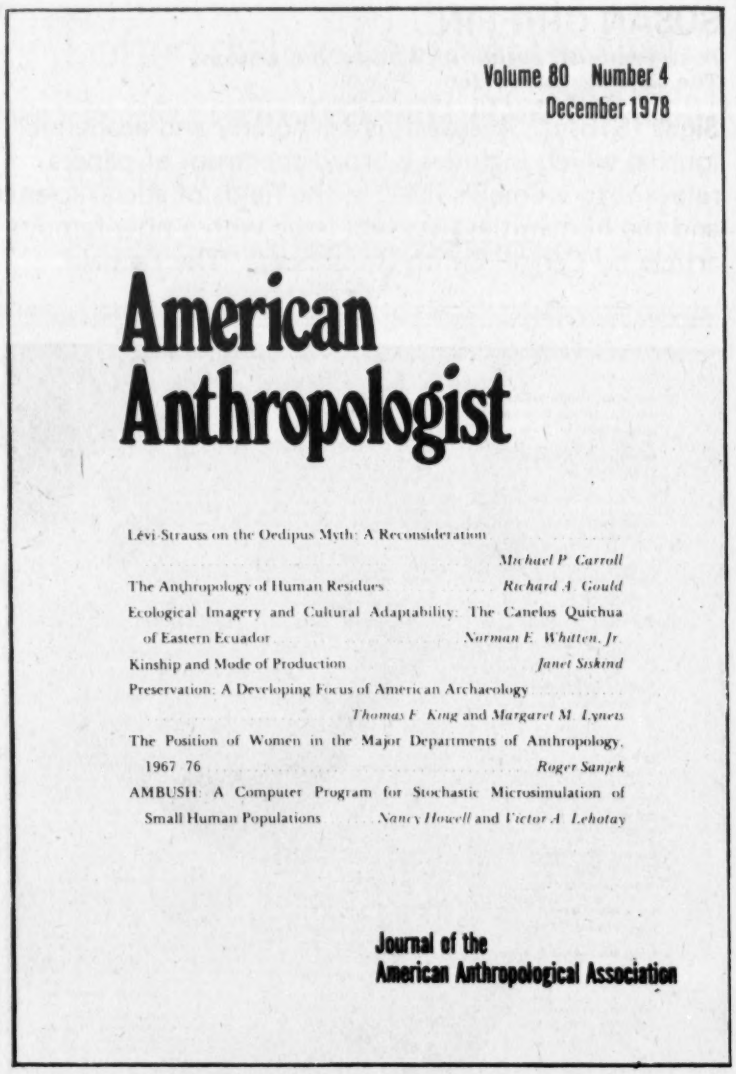
$12/yr. (4 issues)

Where hard science and humanism meet, in the service of new visions and realities for living and just hoping. Almost every issue has something one hasn't heard before.

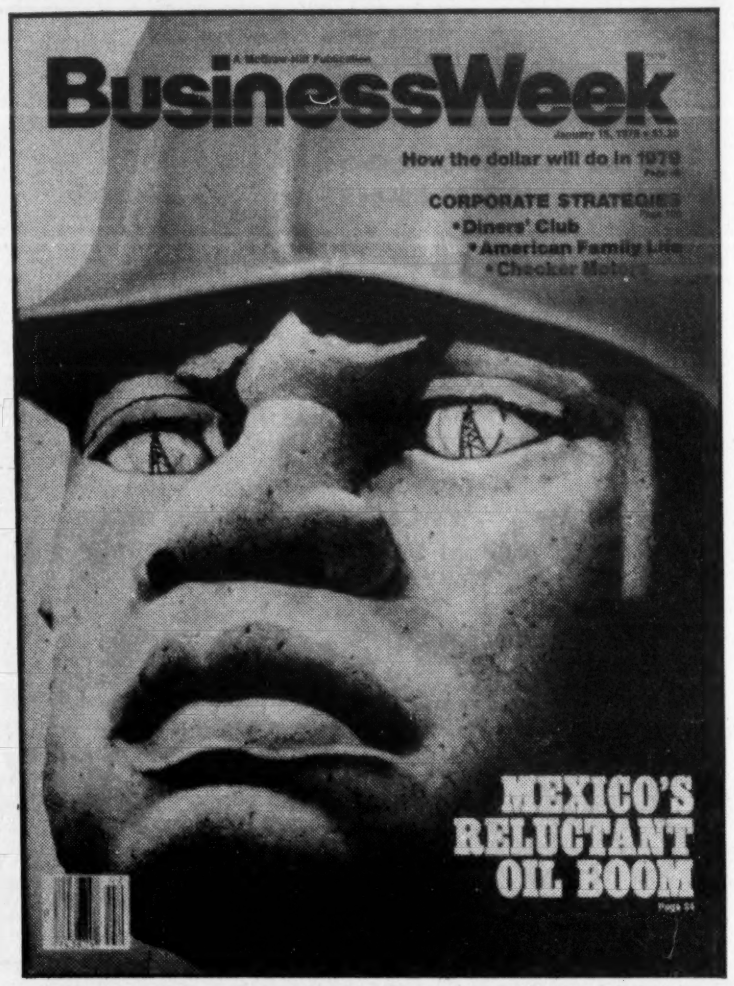
HAZEL HENDERSON

Lay economist; author of Creating Alternative Futures

Here's my *current* list of periodicals. I say *current* because part of my method of accessing information and ideas is to rotate my subscriptions annually, so as to be able to keep tapping and monitoring different currents and worldviews. Also, it is impossible for me to *prioritize* my current list in *order of value*, or any other ordering. These are linear concepts and I do not use linear models very often, so I hope that you will bear with the idea that these periodicals represent my omni-directional "gestalt" at this time, and of course, do not include those other crucial journals which I depend on, such as **Science**, but from which I receive key articles sent by like-minded friends in my network. Incidentally, I would be very interested to know how many others use the type of accessing of scientific papers that I do in fields that I wish to stay abreast of, i.e., economics, information theory, systems analysis, biology and physics. This involves a network of friends and co-researchers, a sort of invisible college, where ideas and papers are exchanged by phone and through the mails, sometimes as much as five years before they get into a journal. I try to select, by many "cross-hatching" enquiries, who are the leading thinkers on the edge of various fields and what the nature of the general debate is in that field. Then I contact these people, (or sometimes they contact me because they are alienated as "too far out") and send them some of my stuff I believe they would find relevant to their own pursuits. This is a type of organic, metaphysical "library," which is also "on-line" and "real-time," as well as being very warm, friendly, exciting and human!



Michael Harner, William Sturtevant and George Putz read **American Anthropologist.**



Business Week, *reviewed by Hazel Henderson and Mike Phillips.*

So with these provisos, here is my list: (in alphabetical order)

Alternative Futures
$8.50/yr. (4 issues)

A new journal, (which I confess I'm on the "inside" of as a member of their Editorial Advisory group) which places today's futurist efforts in an historical, literary and utopian context: a very necessary antidote to today's confused, often ahistorical, Western cultures.

Alternatives
$5/yr. (4 issues)

Canadian views of ecological/industrial/economic/employment issues with a sophisticated political overview.

Business and Society Review
$34/yr. (4 issues)

The best discussion of emerging issues in corporate governance and accountability to the public: economic/political theory in late-stage capitalist and mixed economies.

Business Week
$26/yr. (51 issues)

By far the best journal for staying abreast of international and domestic business news, with analyses superior to any other commentaries in competing publications. Economic analysis is much less dated than other business journals, all of which are still bogged down in "flat earth economics."

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Council on Economic Priorities
$25/yr. (6 reports)

Indispensable information for citizens and shareholder activists on corporate social performance in the areas of pollution control, minority rights, consumer and worker protection, military contracting and foreign operations.

Development Dialogue
Free (2 issues/yr.)

International journal on alternative approaches, theories and practical experiments in socio-economic development. Diverse contributions from North and Southern hemispheres – always innovative.

The Ecologist
$9/yr. (4 issues)

Innovative, irreverent as its publisher, Edward Goldsmith, whose editorial hand is shown in its highly political, often satirical treatment of ecological issues of late-stage industrialism and "me-too" economic development efforts.

Environmental Action
$15/yr. (12 issues)

Best way to stay abreast of legislative battles/opportunities in a broad spectrum of environmental issues, as they are coming up in Washington, as well as key stories from all over.

The Futurist
$15/yr. (12 issues)

Good way to monitor the view of the future "from the top," i.e., Washington, D.C. – oriented, with academic, administrative and bureaucratic visions, as well as many technocratic fantasies. Lately, has taken note of grassroots, earthier futurism and humbler technological alternatives.

Ira Einhorn's Network

An invisible college operated as a free service to invitees only. Like all good networks, it is small and circulates papers mutually between some of the most brilliant and original minds on the planet on many topics not of general interest: e.g., "new concepts" in physics, mathematics, morphology. Participants must contribute their own papers, since networks are always reciprocal. I must list this as one of my best sources of epistomological speculation for the past ten years, even though I can not, for obvious reasons, suggest how to access or make inputs to it. Einhorn is a poet, polymath and activist, a cultural "enzyme" for a transformational era.

Just Economics

Small journal for community organizers and those who work for economic justice and the continual redistribution of wealth which makes for good human societies just as much as for healthy ecosystems. News from the citizen movements all around the country.

Green Revolution
$8/yr. (10 issues)

The grandmother of the appropriate technology/alternative lifestyles/communitarian press. Founded in 1940 by Mildred Loomis, and still covering social change, grassroots activism, communal living, organic farming, innovative education, libertarian values, land trusts and the *real* decentralist movement. *[more→]*

New Age Journal
$12/yr. (12 issues)

Best magazine linking human potential movement ideas, news with political activism, and good, solid grounding that evaluates the helter-skelter, sometimes faddish "consciousness movements" with keen balance and common sense.

The New York Times
$150/yr. (365 issues)

East coast, liberal-centrist view of U.S. and global news, but coverage of international events and economic news is indispensable.

Quest: A Feminist Quarterly
$9/yr. (4 issues)

(Not to be confused with the glossy, mainstream, "all-American," positive-thinking mag of the same name.) Future-oriented political analysis and feminist theory with an international perspective. Cogent economic critique of bourgeois values and institutions and articles covering alternatives in experiment, theory and practice from radical feminist writers and leaders. Essential cross-cut of issues of late-stage industrialism, since in all its forms, it is also patriarchal.

Resurgence
$10/yr. (6 issues)

British-based journal of the Fourth World. International perspectives on decentralism, alternative technology, small communities, ethnic cultures. Editor Satish Kumar was a very early publisher of the ideas of E.F. Schumacher and now administers the Schumacher Society. **Resurgence** provides a forum for spiritual, philosophical, ecological debate as well as the practical and political dimensions of social change.

Self-Reliance
$8/yr. (6 issues)

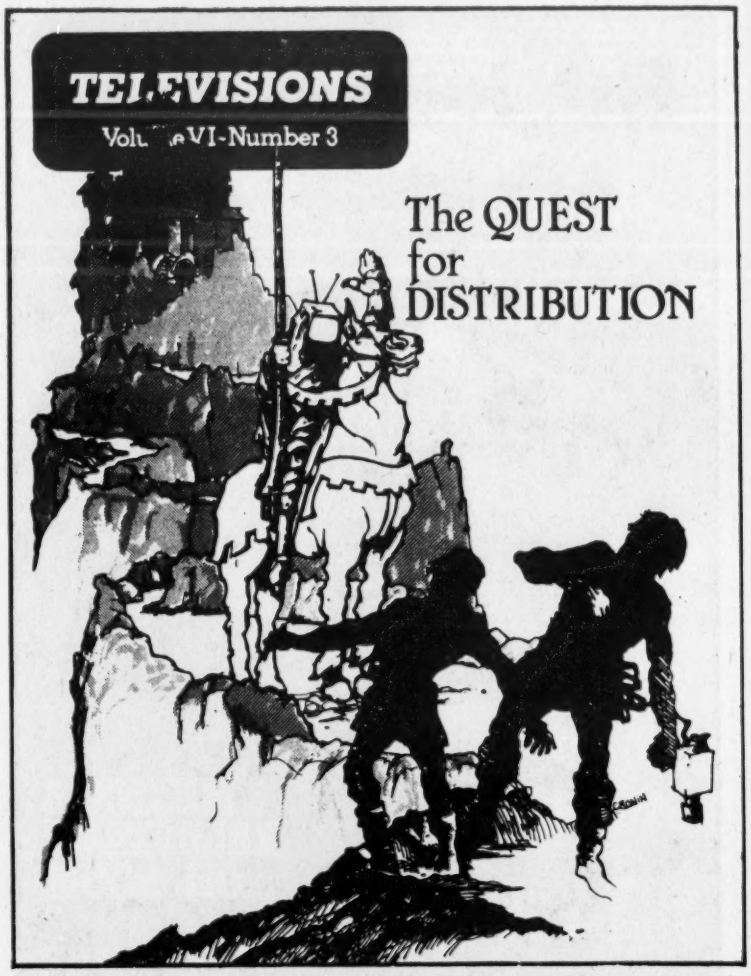
Very useful newsletter covering local economic redevelopment, co-operatives, worker-ownership and self-management, community-owned enterprises and economic opportunities in small-scale, ecologically-restorative activities, such as local garbage handling, food co-ops, etc. Also stays abreast of legislation at federal and state level affecting the viability of these enterprises.

Televisions
$10/yr. (4 issues)

Best alternative media journal around. Keeps track of media activists and changing legislative scene, with excellent political commentary.

Technological Forecasting and Social Change
$42/yr. (8 issues)

International journal covering theory and method in system analysis, modelling, technology assessment. Some of the best from the world's think tanks and universities co-edited from Portland State University, Oregon and the University of Vienna, Austria, with editorial "kibbitzers" ranging from myself to Gennady M. Dubrov, Soviet Academy of Sciences, U.S.S.R.; Mihai C. Botez, University of Bucharest, Romania; Yehezkel Dror, Hebrew University of Jerusalem and Eleonora Masini, World Future Studies Federation, Rome.



Televisions, *reviewed by Hazel Henderson.*

Working Papers
$15/yr. (6 issues)

A think journal of the new, new, new, *new* Left, with this particular slant on the crises of late-stage monopoly capitalism. Uneven, with some of the best new thinking, such as Rosabeth Moss Kanter and Derek Shearer, along with rather tired, recycled Kehnesian redistributive liberalism, such as Christopher Jencks.

World of Work Report
$18/yr. (12 issues)

International news on the workplace, includes experiments in worker ownership, self-management, co-determination, from all industrialized countries. Good reporting, but rather conventional analysis and traditional economic thinking about "productivity" (i.e., still equated with per capita [or labor] productivity, rather than broader definitions needed today: energy productivity, capital productivity and most important, bio-productivity and social productivity).

ANNE HERBERT

Writer, CQ assistant editor, author of **Amanda Madison Is Not Dead** *(forthcoming)*

I read magazines to find good sentences and bad soap opera. The good sentences are for when I want to see the world differently — larger, brighter, more compli-

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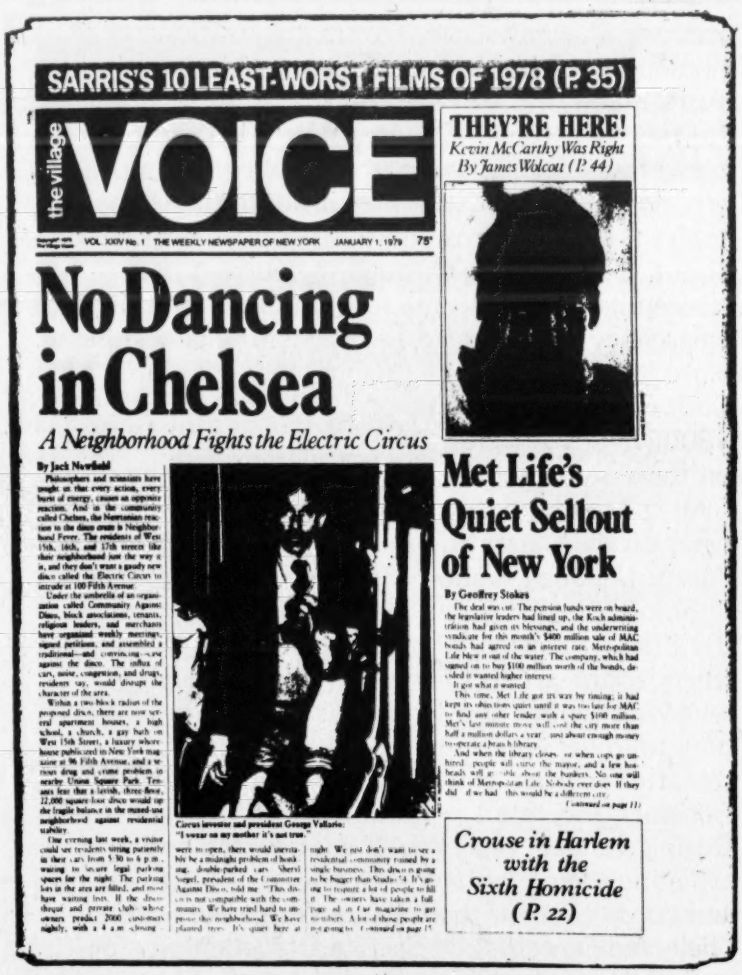


SARRIS'S 10 LEAST-WORST FILMS OF 1978 (P. 35)

the village VOICE

VOL. XXIV No. 1 THE WEEKLY NEWSPAPER OF NEW YORK JANUARY 1, 1979 75¢

THEY'RE HERE!
Kevin McCarthy Was Right
By James Wolcott (P. 44)

No Dancing in Chelsea

A Neighborhood Fights the Electric Circus

By Jack Newfield

Philosophers and scientists have taught us that every action, every burst of energy, causes an opposite reaction. And in the community called Chelsea, the Nietzschian reaction to the disco craze is Neighborhood Fever. The residents of West 15th, 16th, and 17th streets like their neighborhood just the way it is, and they don't want a gaudy new disco called the Electric Circus to intrude at 100 Fifth Avenue.

Under the umbrella of an organization called Community Against Discos, block associations, tenants, religious leaders, and merchants have organized weekly meetings, signed petitions, and assembled a traditional—and convincing—case against the disco. The influx of cars, noise, congestion, and drugs, residents say, would disrupt the character of the area.

Within a two-block radius of the proposed disco, there are now several apartment houses, a high school, a church, a gay bath on West 15th Street, a luxury whorehouse publicized in New York magazine at 96 Fifth Avenue, and a serious drug and crime problem in nearby Union Square Park. Tenants fear that a lavish, three-floor, 22,000 square-foot disco would tip the fragile balance in the mixed-use neighborhood against residential stability.

One evening last week, a visitor could see residents sitting patiently in their cars from 5:30 to 6 p.m., waiting to secure legal parking spaces for the night. The parking lots in the area are filled, and most have waiting lists. If the discotheque and private club, whose owners predict 2000 customers nightly, with a 4 a.m. closing [illegible] were to open, there would inevitably be a midnight problem of honking, double-parked cars. Sheryl Siegel, president of the Committee Against Discos, told me: "This disco is not compatible with the community. We have tried hard to improve the neighborhood. We have planned ours. It's quiet here at night. We just don't want to see a residential community ruined by a single business. This disco is going to be bigger than Studio 54. It's going to require a lot of people to fill it. The owners have taken a full-page ad in Our magazine to get members. A lot of those people are not going to [illegible]

Continued on page 15

Circus investor and president George Vallario: "I swear on my mother it's not true."

Met Life's Quiet Sellout of New York

By Geoffrey Stokes

The deal was cut. The pension funds were on board, the legislative leaders had lined up, the Koch administration had given its blessings, and the underwriting syndicate for this month's $400 million sale of MAC bonds had agreed on an interest rate. Metropolitan Life blew it out of the water. The company, which had signed on to buy $100 million worth of the bonds, decided it wanted higher interest.

It got what it wanted.

This time, Met Life got its way by timing: it had kept its objections quiet until it was too late for MAC to find any other lender with a spare $100 million. Met's last minute move will cost the city more than half a million dollars a year—just about enough money to operate a branch library.

And when the library closes, or when cops go unhired, people will curse the mayor, and a few headheads will grumble about the bankers. No one will think of Metropolitan Life. Nobody ever does. If they did, if we had, this would be a different city.

Continued on page 11

Crouse in Harlem with the Sixth Homicide (P. 22)

Village Voice, *reviewed by Anne Herbert, Paul Krassner, Allen Ginsberg, Anne Waldman, William Burroughs, and R. Crumb.*

cated and all that. The bad soap opera is for when I want to shut down, turn off and veg out. Nothing like a complicated story you don't care much about to space out the old mind. The magazines I read every issue of offer sterling examples of one or the other or both.

The best source of good sentences is **The New Yorker** ($24/yr., 52 issues), in which people write meticulously and often eloquently about everything from bars in Kansas City to pioneers in Alaska to grafters in Washington. The disadvantage of **The New Yorker** is that it's *so* responsible. It doesn't read like it was written by a committee, but it could definitely be approved, *in toto*, by any committee of right-minded liberals. Although Kansas City and Alaska may deserve that kind of respect, Washington definitely doesn't. So for vicious irresponsibility, I read **The Village Voice** ($18/yr., 52 issues). In the absence of H.L. Mencken and the rarity of Hunter Thompson, it has Alexander Cockburn, master of the multidirectional insult. "The case of New Zealand remains deplorable. Cannot this country ever do anything interesting? If only its army were to install a right-wing dictatorship, then at least William Buckley could recommend some PR man to explain its case to the world." **The Voice** also offers the continuing story of NYC politics, in gruesome detail, which is far enough away from affecting me and being affected by me that it's slightly entertaining as well as being totally depressing.

For being depressed with dignity, I go to **Harper's** ($11.98/yr., 12 issues), which views absolutely everything with alarm and sometimes is really pompous and sometimes is really right. For rock soap opera, there's **Rolling Stone** ($18/yr., 26 issues), which also offers the natural suspense of having a very good article in one out of three issues and you never know which one till you buy it. Promising subjects are sometimes overwritten to death and trivia made wonderful through the magic of good writing. I can never give up on a magazine that once ran this quote by director Wernor Herzog in an interview with Jonathan Cott:

During the tryouts, I wanted to find out about the poetic quality of the cast, so I hypnotized them and said: "You are in a beautiful and exotic land which no person from our country has ever set foot on. Look in front of you – there is an enormous cliff, but on looking at it more closely you'll find that it's actually one solid piece of emerald." And I continued: "In this country, a couple of hundred years ago, a holy monk lived here and he was a poet and he spent his entire life engraving just one inscription into this emerald cliff." And I said: "Open your eyes, you can read this inscription."

And one of the men there who tends to the horses in the police stable – he took a look, opened his eyes, and read: "Why can't we drink the moon? Why is there no vessel to hold it?" And the guy next to him was a law student. He took a look and started to read: "Dear Mother, I am doing fine, I just don't know where we're going, but I think everything is all right. Hugs and kisses, Your Son."

And when they don't have anything near that good, it's diverting to find out which of the dozens of groups I haven't heard of is changing labels, suing their manager, getting arrested and getting panned. And I can keep up with my aging sixties faves.

For total soap opera guaranteed to be uninterrupted by a single thought or well-written sentence, I have **People** ($39/yr., 51 issues). It's about people I've been hearing about my whole life, even before the 60s – Barbra Streisand and Christina Onassis and Frank Sinatra – still rich and miserable after all these years. And also about current TV stars who clone after each other from college drama to deodorant ads to brief weekly success to oblivion, with **People** praising them to the heavens in stage 3. It's sort of reassuring, like the return of the salmon – different individual salmon but the same timeless cycle. Those people are also written up with enthusiasm in **TV Guide** ($15.50/yr., 52 issues), which is useful in finding the good stuff on TV and shaming me into not watching the bad stuff. Linearly confronting the choice between "Hawaii Five-O" and "Barney Miller" can make me want to stare at a good ceiling. **TV Guide**, unlike **People**, is not guaranteed worthless. Good sentences lately were "There are no ugly people on local television," from Ron Nessen, speaking of oblivion, and "I'm fine if you don't ask for details," from Katherine Hepburn. (I guess I'll stop buying **TV Guide** if the Shah of Iran really ends up staying at the ranchero of its publisher, Walter Annenburg.)

Meanwhile, back at higher order mind expansion, there's **Chrysalis** ($10/yr., 4 issues). It started publishing about the time I gave up on **Ms.** ($10/yr.,

12 issues) because its **New York** articles recycled with an all-female cast not only didn't seem to be leading to a new world, but didn't even have anything to say about the old one except that women can be warm, caring corporate lawyers. **Chrysalis** gutsily calls itself "A Magazine of Women's Culture," and it often is one. Poetic and bizarre and interesting and good articles and poems and stories about what unique things women, woman, the feminine can bring to life, and where we can find them. Done by the people who did the good **New Woman's Survival Catalog** and the great **New Woman's Survival Sourcebook**.

I kind of miss reading half of **The CoEvolution Quarterly** for pleasure, though reading all of it for money has taught me much about solar construction and space I would have otherwise skipped.

All of the above magazines are about things I've always thought I was interested in. My last one is about Japan which I was never particularly interested in until I stumbled on this magazine. **Kyoto Review** ($3/issue, irregular) is about Japanese culture and about Americans living in Japan experiencing culture shock and delight. It's where I found out that many Japanese want to speak English and few can whereas many Southeast Asians can speak English and often refuse to as a matter of principle. I've thought about that a lot.

I also read a lot more magazines occasionally, all the basic drugstore and health food store glossiness and hippiness. I grew up reading all the **Time/Life/Look/Newsweek**/women's magazines stuff, and I realized while writing this that I usually do my own writing in terms of commenting on, replying to, improving on the world of magazines rather than the world of books. When I went to the drugstore newsstand when I was in high school, I wanted them to tell me what everybody else in the world was doing right then and they kept telling me, again, the biographies and recent activities of Lyndon Johnson and Jackie Kennedy. So now I write about, ask other people about the trivia I wanted magazines to tell me about then. Hmm.

ROBERT HORVITZ

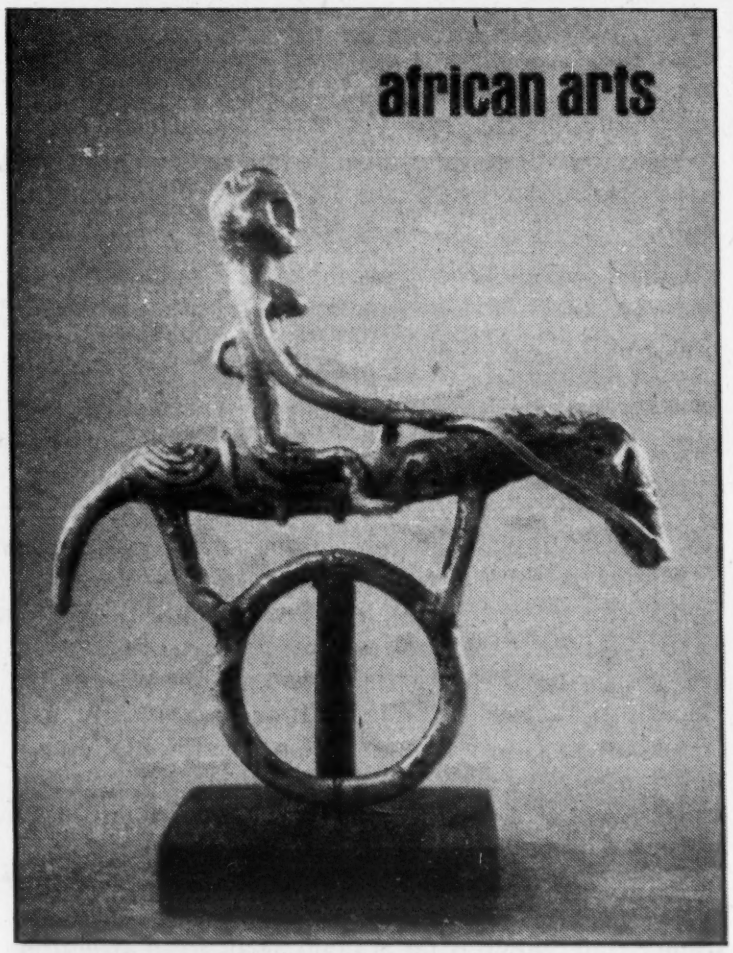
Artist; CQ art editor

Mass Media Booknotes
$5/yr (12 issues)

Chris Sterling's no-frills newsletter gives concise, utterly reliable summaries and evaluations each month of 30 - 50 new publications in journalism, broadcasting, publishing, pop music, telecommunications, cinema, photography, media research and policy, graphic design, etc. Each year's August issue is devoted to a review of all U.S. Government publications on media from the previous year, and the December issue is a similar roundup of books on film. I've spent more money at **MMB**'s prompting – and gotten more in return – than I can say.

Washington International Arts Letter
$18.75/yr (10 issues)

Apparently aimed at administrators of large arts organizations, this newsletter covers the politics and economics of so-called High Culture, behind the scenes stuff, much of it focussed on the National Endowment for the Arts (NEA), Congress, Joan Mondale and her crew, foundations, and corporations with ambitious arts programs. But sprinkled around these sober topics are some items you'd otherwise never hear about. Just flipping through the current issue (December-January), the lead article is on sources of emergency financial aid for artists (the largest being Robert Rauschenberg's Change, Inc., P.O. Box 705 Cooper Station, New York, NY 10003 and P.O. Box 480027, Los Angeles, CA 90048); there's an update on funding for the NEA and the White House Conferences on the Arts and Humanities; who's doing what on the Carter administration's task forces on "cultural policy"; short pieces on the emergence of "homo-erotic art galleries" in several cities, and on the first TV station whose programming is devoted solely to the arts (Channel 8, Redondo Beach); reviews of goods and services (seminars for actors on how to lower audition anxiety, Panasonic's new videocassette recorder, shows available from Independent Curators, Inc., etc.) . . . that's about half the issue. During the past year, **WIAL** has devoted entire issues to listing the names and addresses of all the panelists and consultants to the NEA, and to a very useful "Selected Directory of Service Organizations for Those in Arts/Humanities Fields of Culture." They also publish a couple of useful reference books, the most relevant to **CQ** readers probably being their **National**



African Arts, *reviewed by Robert Horvitz*

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Directory of Grants and Aid to Individuals in the Arts ($13 from Allied Business Consultants, same address as **WIAL**; I've never reviewed this for you because I have mixed feelings about grant-dependency). All in all, this tough little insider's bulletin illustrates Mike Phillips' observation about money-flow telling you one helluvalot about culture.

African Arts
$16/yr (4 issues)

This sumptuous magazine has been so successful in turning people on to African culture that it must be held partly responsible for the commercial exploitation that now threatens the work it honors – an awkward situation which the editor, John Povey, discusses at some length in the November issue. Ethical questions aside, the articles are all pretty academic (not the same as uninteresting – the November issue has a neat report on the role of village photographers in Yorubaland), and the pictures, which take up about half of the total page space, will knock your eyes out. I read this magazine as an antidote to media narcosis and New York gallery modernism – to get high on truth/beauty/humanness.

InterMedia
$17/yr (6 issues)

I suspect there's a better magazine covering the same subjects somewhere, but I've never run across it, and I've looked hard. **InterMedia** covers the forces and institutions that shape the flow of information worldwide. Want to know how Franco's death affected Spanish radio and television? how regional news cooperatives are doing in Asia? how the underdeveloped nations' concept of a "New Information Order" alarms the overdeveloped nations, with their concept of a "Free Flow?" how Italian radicals responded to the supreme court's declaration (in 1976) that the decades-old state monopoly of broadcasting was unconstitutional and public access to the airwaves was a right? **InterMedia** will tell you. It's all in English, too.

Satellite Communications: The International Magazine of Satellite News, Applications and Technology, *also reviewed by Horvitz.*

Satellite Communications
$14.95/yr (12 issues)

The introduction to my interview with Chip Shooshan and Andy Margeson about the Communications Act of 1978 ("Getting into THE ACT," **CQ**, Winter '77-'78) contained many factual errors, the most embarrassing being the blithe assertion that the U.S. had no domestic communications satellite system yet, even though we'd been offering international service for a decade. Well, some kind (anonymous) soul took pity on my ignorance and got me a subscription to **Satellite Communications**, which also had been reviewed in **CQ** (Winter '77-'78). Almost every issue has contained an article that changed my thinking – about public television, for instance – or provided something altogether new to think about – this fall's World Administrative Radio Conference, for instance, at which major revisions in frequency use, affecting all kinds of services, will be discussed. It's a trade journal, but it wisely realizes that most prospective buyers and users of satellite equipment don't know much about the technology yet, so jargon is minimal.

Variety
$35/yr (52 issues)

Don't be put off by the jargon. This is an excellent newspaper, in many ways comparable to the **Wall Street Journal**, only focusing on show biz. Another good illustration of Mike Phillips' "cherche le cash" principle.

Journal of Communication
$15/yr (4 issues)

The best of the academic journals covering this subject.

Claustrophobia/Boundary Resistance
$30/yr (6 issues)

This isn't quite a magazine. It's a compilation of several small magazines, a different combination each time out, all of them having something to do with Life expansion: **L-5 News**, **LongLife Magazine**, **The Cryonicist**, **Foundation Report**, **Individual Liberties**, etc. The editors also provide interesting tidbits from yet more magazines in their "Newswatch" column. It's a good way to get more mileage out of your subscription dollar, brings me news I'd otherwise miss.

RON JONES

Teacher; Zephyros publications; author of "The Third Wave," The Acorn People, "Winning"

Scan ($7/yr., 9 issues), reviews media. All kinds of media from books to films to cassette networks. **Recycle** ($7.50/yr., 9 issues), collects and returns to a cleric readership – lessons for living, preaching, and most important of all doing. (5000± subscribers.)

[more →]

The Games Preserve. If you send them a list of needs pertaining to teaching and $2.00 they'll return to you via mail ten cards – describing play activities related to your request. Nice, huh?

Teachers and Writers Collaborative Newsletter
$5/yr. (4 issues)

If there are stars in the heaven **Teachers and Writers Collaborative Newsletter** helped to put them there. For $5.00 you get a handful of learning stars four times a year.

Now that you've started me thinking about periodicals I'm going to look into the current status of **Trecker** (Australia), **E.E.C.**, **Highlander**, and **The Center for Open Learning.** I'll write up descriptions once I get the latest poop.

In addition to serial publications that you can count on entering your life every third Wednesday I've experienced some "spontaneous publishing." For example I know a grandmother in Canada who xeroxes her latest experiences, thoughts, and mails them to friends. These spontaneous sling shots don't come in a regular beat but when they do I read them with a passion.

HERMAN KAHN

Futurist, head of Hudson Institute; author of On Thermonuclear War, Thinking About The Unthinkable, The Year 2000, The Next 200 Years.

[This one was phoned in by Kahn's secretary.]

London Economist
$65/yr. (52 issues)

Public Interest
$9.50/yr. (4 issues)

Wall Street Journal
$55/yr. (260 issues)

New York Times
$150/yr. (365 issues)

Newsweek
$29.95/yr. (52 issues)

Time Magazine
$31/yr. (52 issues)

Science
$65/yr. (52 issues)

Fortune
$24/yr. (26 issues)

Christian Science Monitor
$45/yr. (260 issues)

U.S. News & World Report
$22/yr. (52 issues)

Business News
Free (12 issues)

at the local smorgasbord. Few magazines have more than one article per month I want. **Atlantic**, **Harpers**, **Playboy**, **New Yorker**, **Quest**, **Outside** make their way home with me about three times a year.

The Defense Monitor
Free (12 issues)

Ex-generals who have come to their senses and are keeping track of the rehtoric vs. the reality of the military-industrial complex and suggesting what is required for a reasonable defense policy.

The Washington Spectator
$10/yr. (24 issues)

A four-page summary of information on an issue currently in focus, or one that should be in focus, in Washington.

Brain/Mind Bulletin
$15/yr. (26 issues)

A four-page summary of information of what scientists think is going on inside my head at the moment. Helps me keep track of my hypothalamus and endorphins.

CoEvolution Quarterly
$12/yr. (4 issues)

For surprises. The only modern wishbook to replace the **Sears Roebuck Catalogue**.

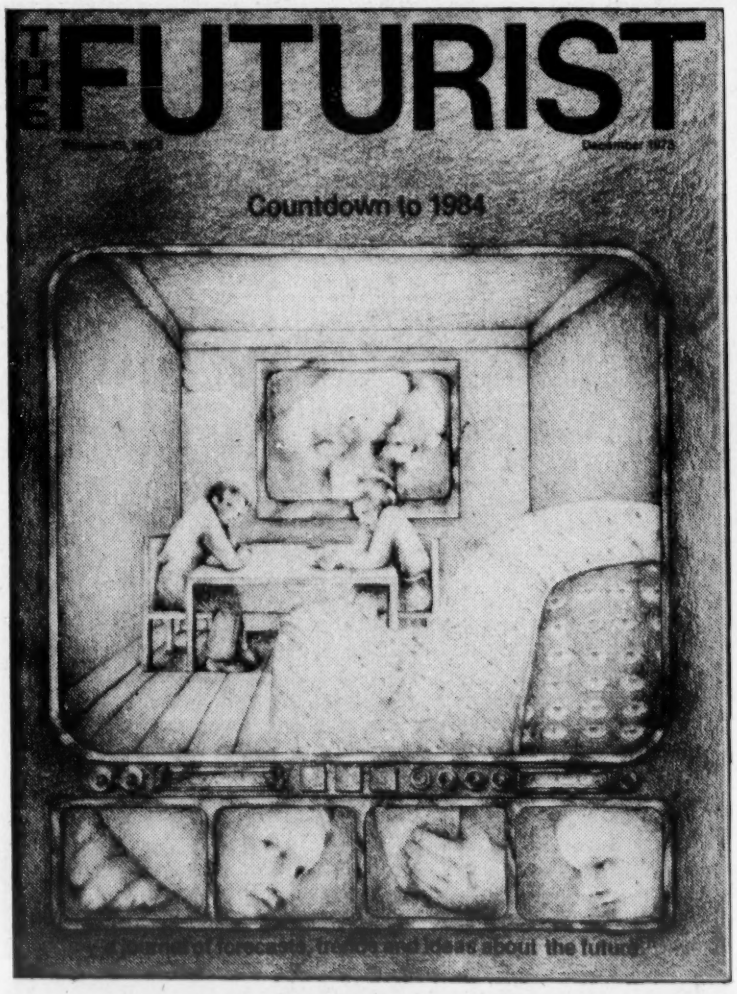
The Catholic Worker
$0.25/yr. (9 issues)

I like to be reminded that there are still people who

SAM KEEN

Writer; author of To a Dancing God, Apology for Wonder, Beginnings Without End

Promiscuous samplings. I spend several hours tasting



Sam Keen, Adam Smith and Hazel Henderson read **The Futurist: A Journal of Forecasts, Trends, and Ideas About the Future.**

approach political issues with conscience and moral principles that don't bend as much as mine.

The New York Review of Books
$14.50/yr. (22 issues)

Keeps me tuned into a bookish, intellectual world more rigorous (if less relevant) than the one I inhabit in California.

Parabola
$12/yr. (4 issues)

For the news that is never new but always relevant. Everything about myth that is fit to print.

Science News
$15.50/yr. (52 issues)

The latest findings about quarks that doesn't tell me more about particles than I want to know.

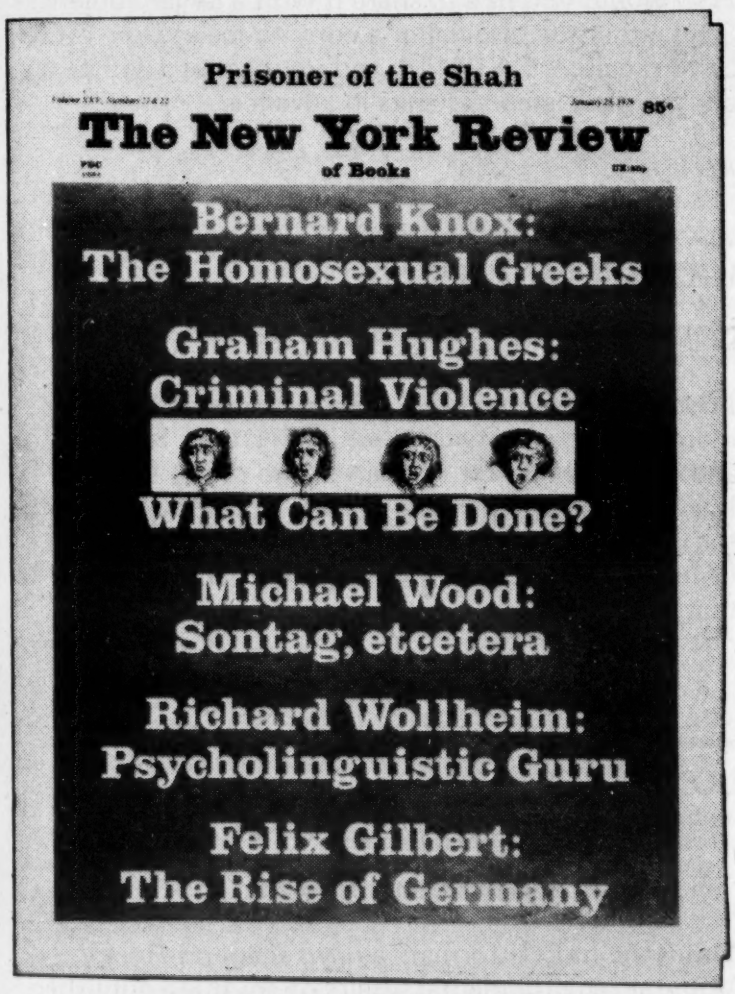
The Futurist
$15/yr. (6 issues)

The latest fantasies, projections, and predictions about tomorrow.

Newsweek
$29.95/yr. (52 issues)

Like watching Walter Cronkite. I want to know the slant at which the news arrives to middle-America.

I also read **Psychology Today** ($12/yr., 12 issues) and and **New Age** ($12/yr., 12 issues) because I am on the masthead.



The New York Review of Books, *reviewed by Sam Keen, Bruce Ames, Allen Ginsberg, Alice Tepper Marlin, David Shetzline, William Sturtevant, and John Todd.*

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PAUL KRASSNER

Editor, comic;* The Realist *and innumerable columns and articles

Several years ago I was a guest on the "Today" show, and Barbara Walters asked me about the underground press. I wondered which magazines she meant. **Life**? **The Saturday Evening Post**? **Look**? They were all underground – six feet, to be exact – but now they've been reincarnated. What's next, the return of **Collier's**?

Moreover, two of the best contemporary periodicals – **New Times** and **(MORE)**, a journalism review – have both folded. But at least **Mother Jones** ($12/yr., 10 issues), has survived; it's my favorite monthly. My favorite quarterly is **The Skeptical Inquirer** ($15/yr., 4 issues), published by The Committee for the Scientific Investigation of Claims of the Paranormal.

Other specialty publications I find particularly useful are: **Majority Report** ($7.50/yr., 26 issues), a feminist bi-weekly. **The Civil Liberties Review** ($17.50/yr., 6 issues), published by the ACLU. **The Black Panther** ($6.50/yr., 26 issues) – despite (or perhaps because of) such exquisitely paranoid editorials as the one which suggests, "It is quite possible that the neutron bomb was used at Jonestown."

I recommend newsstand browsing for individual purchases of magazines like **American Astrology** ($9/yr., 12 issues), for specific articles such as "The Astrological Implications of Clones." I find indispensible **The National Enquirer** ($9.95/yr., 52 issues), which is the largest circulation weekly in America and thus highly revealing of mainstream consciousness, and its ilk, such as **Close-Up**; where else could I learn that "David Berg, leader of the notorious Children of God, tells his female disciples to make love – for Jesus. He has organized an army of these young women. They are known as 'Hookers for Christ' and they use their bodies to lure men into Berg's organization."

For humor there is only **National Lampoon** ($9.95/yr., 12 issues) and **Wings** ($5.50/yr., 6 issues, formerly **Sufi Times**); the latter, which describes itself as "the new age satire magazine," is published every other month (under such parodic titles as **The Saturday Evening Wings**, **Better Wings & Gardens**, and **Playwings**).

I find some of the best investigative journalism in the so-called men's magazines. Their research departments are among the best in publishing. When I covered the Patty Hearst trial for **Playboy**, they required documentation for virtually every statement of fact. **Penthouse**'s ($20/yr., 12 issues) series on the Tri-Lateral Commission were xeroxed by White House staffers. Even **Hustler** ($15/yr., 12 issues), for all its concomitant raunchiness, has an extremely conscientious research staff.

New West ($13/yr., 26 issues) and **New York** ($18/yr., 52 issues), often contain information and ideas I get nowhere else. Specialty magazines include **High Times** ($10/yr., 8 issues) for dope news and **Psychology Today** ($12/yr., 12 issues) for pop trends. Professionally I try to keep up with the **Columbia Journalism Review** ($12/yr., 6 issues), the **Washington Journalism Review** ($16/yr., 12 issues), **Atlas World Press Review** ($16/yr., 12 issues), and **Alternative Media** ($6/yr., 6 issues).

[more →]

Counter-culturally, I manage to alternate between **New Age** ($12/yr., 12 issues), the **Yipster Times** ($0.25/issue, irregular), the **Yoga Journal** ($7.50/yr., 6 issues), the **Berkeley Barb** ($10/yr., 26 issues), and **East-West Journal** ($12/yr., 12 issues). **Psychic** magazine has changed its name to **New Realities** ($9/yr., 6 issues), and as if to foretell the new reality of its own cynicism, plans not to review books of small publishers in the hope of getting ads from big publishers.

Society ($15/yr., 6 issues, formerly **Transaction**), is an excellent review of the social science field. Also **Human Nature** ($15/yr., 12 issues).

Current ($11/yr., 12 issues) is a kind of intellectual **Reader's Digest**, monthly. Also, Steve Swain, managing editor of **San Fernando** [Valley] magazine, is planning a **Table of Contents Digest** of major magazines as a weekly newsletter.

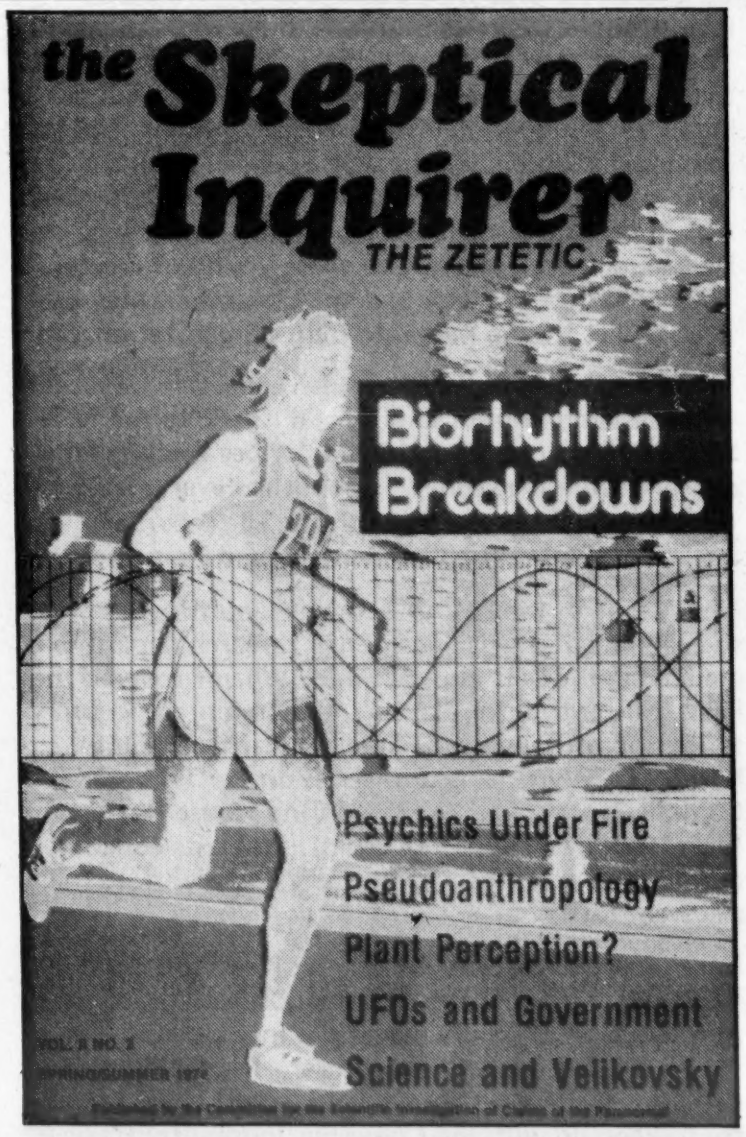
Finally, there is **The Realist**, which hasn't been published in 4-1/2 years, but its schedule was always so erratic that many subscribers don't even know it's in a state of suspended animation. Most of the story ideas I've had during this dormant period have ended up in the **Village Voice** ($18/yr., 52 issues), **Rolling Stone** ($18/yr., 26 issues), and even on network TV documentaries or "Saturday Night Live."

The rate of acceleration from underground to mass media is increasing every day. **Zodiac News Service** ($5/yr., 52 issues), and **NewScript** are each intended mainly for radio stations and weekly papers, but provide a fine summary of news items, especially when one falls behind reading the dailies.

I would also recommend the weekly **Variety** ($35/yr., 52 issues), for stuff about censorship plus the use of show business as a barometer of where we are heading politically and spiritually.

Oh, yes – and the **San Francisco Bay Guardian** ($13.50/yr., 52 issues), publishes my annual predictions, so *they* can't be *all* bad.

For a combination of visual satire and combat history, I recommend the underground comix, from **Zap** to **The Whole 40-Year-Old Hippie Catalog** selectively. Also, I'll be looking forward to **Persons – Journal of Contacts**, to be published by Lee Glickstein, 121 Corbett Ave., San Francisco, CA 94114. He intends it to be "a tool – a clockwinder – for the inwardly mobile creative person." I must say that participating in this whole **CoEvolution** magazine project has inspired a feature I'd like to include in the return issue of **The Realist**. You know that clipping or cartoon or quote you've kept on your bulletin board? How would you like to share it with a larger audience? Send either the original or a copy to me at Box 14667, San Francisco, CA 94114, and your reward will be a copy of that issue. Thanks in advance.



Paul Krassner reads **The Skeptical Inquirer/The Zeteic: Journal of the Committee for the Scientific Investigation of Claims of the Paranormal**

URSULA LE GUIN

Science fiction writer; author of **The Dispossessed, The Left Hand of Darkness, Earthsea Trilogy, The Word for World is Forest, The Lathe of Heaven.**

I don't seem to read any magazines regularly any more – still get **Science News** and **Natural History** and **The New Yorker** (the latter two partly because I have read them ever since I learned to read) but the only periodical I always read through is the **TLS (London Times Literary Supplement)** and now that's stopped.

LUNA LEOPOLD

Hydraulic engineer; author of **Water** *and* **Fluvial Processes in Geomorphology**

High Country News
$12/yr. (26 issues)

This is the most informative news sheet on Rocky Mountain environmental affairs of anything published. Feature articles give facts, personalities, and history. Though mostly concerned with western states, has

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good articles on Alaska and elsewhere. Excellent analyses of government actions and their effects. Usually includes a long article on some individual person, especially persons concerned with conservation initiatives.

Science
$65/yr. (52 issues)

Scientific journal and newsmagazine of the American Association for the Advancement of Science, Washington, D.C. Best national coverage of political news about science, universities, laboratories, and government policy. Especially knowledgeable reporters, including Luther Carter, Deborah Shapely. Most articles in the scientific portion are on biochemistry, but when papers on geological or space science are included, they always appear first in the sequence of papers.

Scientific American
$18/yr. (12 issues)

Articles cover a whole variety of subjects in astronomy, physics, medical biology, geology, archeology, resources. Written for the well-trained layman, the articles are never easy but aim at making complicated matters understandable. The most condensed explanations of current technology and ideas in science that are to be found anywhere.

American Scientist
$15/yr. (6 issues)

Magazine of Sigma Xi, the Scientific Research Society. Much like Scientific American, but with fewer features or special sections. Articles cover a whole variety of technical subjects, are well written and understandable to the trained non-specialist.

Gray's Sporting Journal
$19.50/yr. (6 issues)

Beautifully illustrated, slick paper magazine on exploring, hunting and fishing. Advertisements are especially interesting to persons concerned with gems and fishing tackle. Unfortunately, it does not deal with any conservation, environmental, historical or resource matters. Because it reaches an affluent and potentially influential group, this complete disassociation from current environmental concerns is a shame. Like National Geographic, it never touches a controversial subject. With all the need to promote conservation ethics and environmental protection, this policy makes the magazine less useful than it might potentially be.

Audubon
$13/yr. (6 issues)

The most beautiful, slick paper magazine on nature and the natural world that is published in the world. Photographs used as illustrations are in remarkable color and technically beautiful. Articles vary from environmental discussion to more beautiful prose but the former are more interesting than the latter. Less effective as a news report on conservation than it used to be; formerly a news column written by associate editor, Roxanne Sayre, was included in each issue. Recently her few pages of environmental news have been missing, much to the detriment of the magazine. Many articles deal in depth with controversial issues and these are the best of the magazine.

JAMES LOVELOCK

Free-lance scientist, developer of gas chromotography, co-deviser of The Gaia Hypothesis

As you may know I live in a remote country region and I am by nature reclusive. Contact with the world comes through occasional visits to and from here, the postal delivery of journals and letters and perhaps more important BBC radio and television. The sheer excellence of this last information source makes it truly our window to the world. Not only for news, current affairs and documentaries but also the entertainment and the ever living encyclopedia of the Open University.

So my list of journals must be in consequence more trivial than it might have been elsewhere. Here they are in no special order. I could not rate them, they are so different.

I use journals to publish in as well as to read. Therefore the tally of papers accepted and published to the total submitted is included with each journal in the list.

Nature
$165/yr. airmail (52 issues)

They used to have letters from country clergymen reporting such as the sighting of a crestless crested grebe and these along with letters whose contents altered the whole course of the World. No scientist

Scientific American, *read by James Lovelock, Anne Waldman, Paul Ehrlich, Anne Ehrlich, Michael Murphy, Allen Ginsburg, Lynn Margulis, Peter Vajk, Heinz Von Foerster, Luna Leopold, Philip Stewart, George Putz, and Peter Warshall.*

should be without it. 30/31 *[30 out of 31 articles submitted were published.]*

New Scientist
$54/yr. (52 issues)

How to be radical without being dogmatic. My favourite weekly.

Times and **Sunday Times** (London)

The only newspapers I read. The reporting of those things I have known about is accurate. The reporting of court cases is something special. Then there is the crossword and the columns and so on. Pity they are closed by a strike. 3/5

Science
$65/yr. (52 issues)

Nature with an American accent. Excellent review articles but a strange publication policy hence — 0/5.

Proceedings and Transactions of The Royal Society

For those heavyweight scientific papers I can understand and also for the splendid reviews on the history of science. 4/5

Scientific American
$18/yr. (12 issues)

A glorious glossy which shows how always the grass is greener across the disciplinary fence. It has aroused and fed my curiosity since I first read a copy in 1931. 0/0

Chem Tech
$18/yr. (12 issues)

Entertainment and curiosities for chemists and their friends. 0/0

CoEvolution Quarterly
$12/yr. (4 issues)

What can I say. May be like the beer commercial, "It satisfy's the parts the other Journals cannot reach."

LYNN MARGULIS

Microbiologist; author of Origin of Eukaryotic Cells; *co-deviser of The Gaia Hypothesis*

Journal of Cell Biology
$125/yr. (12 issues)

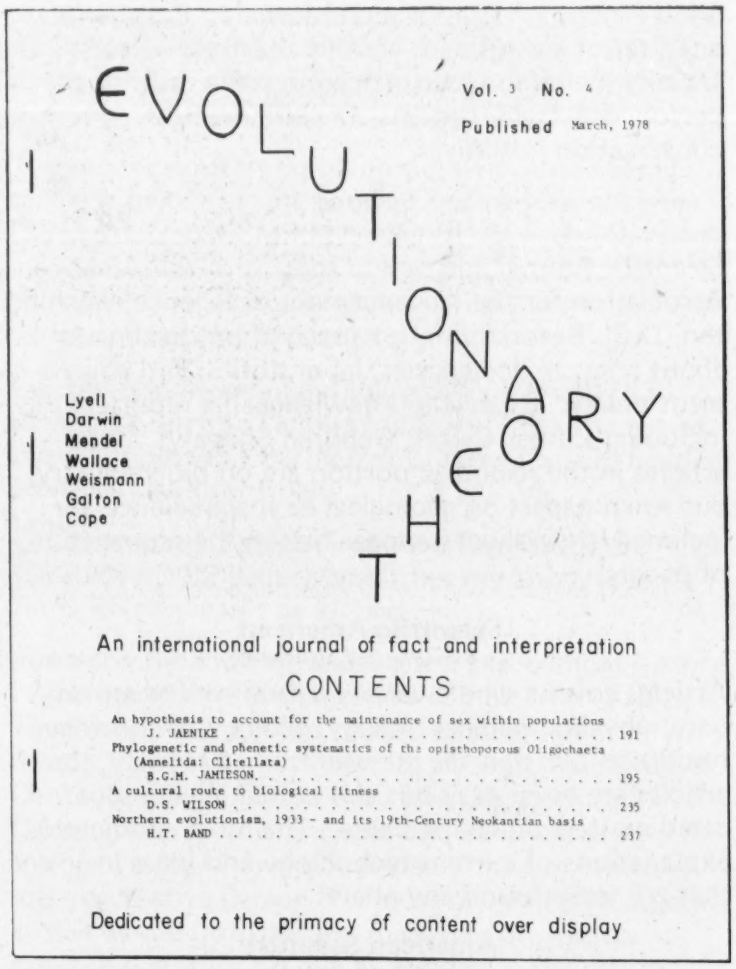
I read this to see the extent to which the medical mind is taking over the field of cell biology, once a science. Also to see what organs (kidneys, livers, ughh), concepts (fluid membranes, proton pumps), and techniques (radioimmunifluorescence, freeze etching in microscopy and so forth) are "in" . . .

Proceedings of the Royal Society

This is terrific, especially when an entire issue is devoted to a topic such as symbiosis (out next month) or atmospheric cycling (out within the last few years). They take their editorial jobs as seriously as **The New Yorker**, and it shows, especially in the Figures and Plates. Of course, they misspell a lot, from our point of view.

Evolutionary Theory
$10/yr. (irregular)

This mimeographed idiosyncratic piece is absolutely indispensable to determine what bright new ideas in evolution are being rejected by the Biggies (e.g., **Evolution, Systematic Zoology, American Naturalist**).


EVOLUTIONARY THEORY

Vol. 3 No. 4
Published March, 1978

Lyell
Darwin
Mendel
Wallace
Weismann
Galton
Cope

An international journal of fact and interpretation

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Dedicated to the primacy of content over display

Lynn Margulis reads **Evolutionary Theory: An International Journal of Fact and Interpretation.**

Origins of Life
$240/yr. (4 volumes)

In order to find papers about bacteria and their virus by non-card carrying authors, or those theorizing about life's origins with no data at all, or those telling about origin of life, or "laboratory simulation experiments" which usually means organic chemistry with fewer controls than those necessary to publish in organic chemistry journals . . . this is a must. Besides, I'm an editor.

BioSystems
$43/yr. (4 issues)

This journal has been in search of an identity for some years. We are helping it find one in the field of protist (algae, protozoa, slime molds, some fungi, etc.) evolution. It has come out with some splendid issues.

PAGEOPH

In the summer of 1978, they ran an entire issue on the results of an international congress held in Mainz, West Germany called, "The influence of the biosphere on the atmosphere." The only one of its kind. It began a new field. Wolfgang Seiler gets a lot of credit, so does Chris Junge. (This congress was his birthday party. He is an atmospheric chemist with whom Lovelace has worked.)

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Alice Tepper Marlin, John Todd, Herman Kahn, William Irwin Thompson, James Watson, Anne Waldman, Anne Ehrlich, Paul Ehrlich, Francisco Varela, Witold Rybczynski, Hazel Henderson, Ian Ballantine, Michael Harner, William Sturtevant, and Adam Smith read **The New York Times.**

Journal of Molecular Evolution
$190.50/yr. (12 issues)

For biochemists, organic chemists, bacteriologists, other biology loving types, this is the only journal that permits one to admit that microbes, too, are products of evolution.

Applied and Environmental Microbiology
$70/yr. (12 issues)

Occasionally very useful for microbial community analysis and especially for new methods of measuring microbes and their action in the field.

Journal of Bacteriology
$115/yr. (12 issues)

Many of us were sorry to see their taxonomy section go . . . Now one doesn't describe new microbes here, but it is good for bacterial physiology, morphology and lots of other bacteria stuff.

Cytobios
$195/yr. (3 volumes)

Microbios
$195/yr. (3 volumes)

Occasionally these sister journals print information on microbes and cells that is very useful and not seen elsewhere. Nice paper — they do editing and plates clearly.

Scientific American
$18/yr. (12 issues)

This 0.5 million circulation enterprise is getting so standardized that nearly all of us could write it if we went to the correct parties with the right people. Anyway, it is good to find out what the authors do on Sundays and what happened fifty and a hundred years ago. Things change quickly. Scientists know not to trust it because unlike all of my other entries, it is not reviewed — rather conformed to the unmistakable **Sci. Am.** style by their Madison Avenue intramural staff regardless of the confusion and misinterpretation this introduces into the articles. Oh well, they sell.

Current Microbiology

A new Springer-Verlag journal with a lot of pep. Short papers with lots of info about any aspect of microbiology.

Precambrian Research
$117/yr. (8 issues)

Critical for those of us trying to figure out the effects of the earliest life on the earliest Earth and vice versa. The geology is a healthy learning experience.

I could go on but I expect already that you've figured I have a one track mind. Actually, I read **The New Yorker**, especially profiles, all the time.

ALICE TEPPER MARLIN

Founder and Executive Director of the Council on Economic Priorities

It's hard for me to compile a list because I do my periodicals reading not regularly but by perusing a large number of publications, seeking out only those articles in which I'm directly interested, and by reading an enormous number of clippings and articles with circles and arrows sent my way by friends, enemies, John, and CEP staff and Board members. But I'll do my best to be honest and only list a publication if I read just about every issue and clip it, or refer to it frequently.

New York Times
$150/yr. (365 issues)

Like most other perverse Easterners, I am totally addicted to the **NYT**. My main source of information, and directory for studies or reports I need to obtain, or people with whom I should talk, comes from what John leaves me of the **NYT** after he's clipped it earlier in the morning. I always read the front section, check the weather summary so I can decide how warmly to dress, and read the News Index, the Op-Ed Page, and the Business Section. I mark up the TV section every Sunday, using the **Times** excellent one-line program reviews to sort out from the jumble a couple of programs really worth watching.

New Yorker
$24/yr. (52 issues)

The **New Yorker** is my lifeline to the world of the literate and my nostalgia trip to the good old days when I read for pleasure rather than for use. In addition, I use the New Yorker for film and theatre reviews.

The Foundation News
$20/yr. (6 issues)

Groan! The moment a new issue appears on my desk, I grab a pen, tear out the section listing grants — beautifully indexed by foundation and recipient — and search for good funding prospects for CEP. I mark it up, tear out pages, and file them by foundation after I've made notes in my Day Timer to remind myself of followup.

CEP Studies, Reports and **Newsletters**
$25/yr. (6 reports, 12 newsletters)

These are the only publications I read more than once.

[more ➔]

I've usually read and commented on them several times before they appear in print. Then I need to study them in final form to be fully informed of the Council's Evaluations of corporate social performance and the effectiveness of government as it regulates business, or is pushed around by the business community.

COMP Newsletter
$15/yr. (6 issues)

This is my best source for how cities rate, what their financial reports show and fail to show, and major scandals in city governments. It's also the best way in my hectic life to find out what my husband John (who writes it) is up to at the office. (COMP is the Council on Municipal Performance.)

Wall Street Journal
$55/yr. (260 issues)

An excellent supplement to the **New York Times**. Much of the business and sociological information here is more independently gathered and more carefully analyzed than the business stories in the **Times**. I particularly read the squibs on the left hand columns of the front page and the long features on the right hand column of the first page. I avoid the editorial page – it's unrealistic, reactionary and downright silly.

Washington Post
$159.50/yr. (365 issues)

Excellent coverage of national news, particularly legislative agency actions and the juicy details on how the results came about. Editorial positions are congenial. **WP** was the best substitute while the **NY Times** was on strike. (No New York paper could substitute for the **Times**.)

CoEvolution Quarterly
$12/yr. (4 issues)

May be the most fun and refreshing publication I read regularly. **CQ** is my lifestyle fantasy. I enjoy reading about the ideas and projects I would like to spend more of my life at. It continues to inspire me to simplify my life.

The Corporate Examiner
$25/yr. (11 issues)

IRRC Newsletter

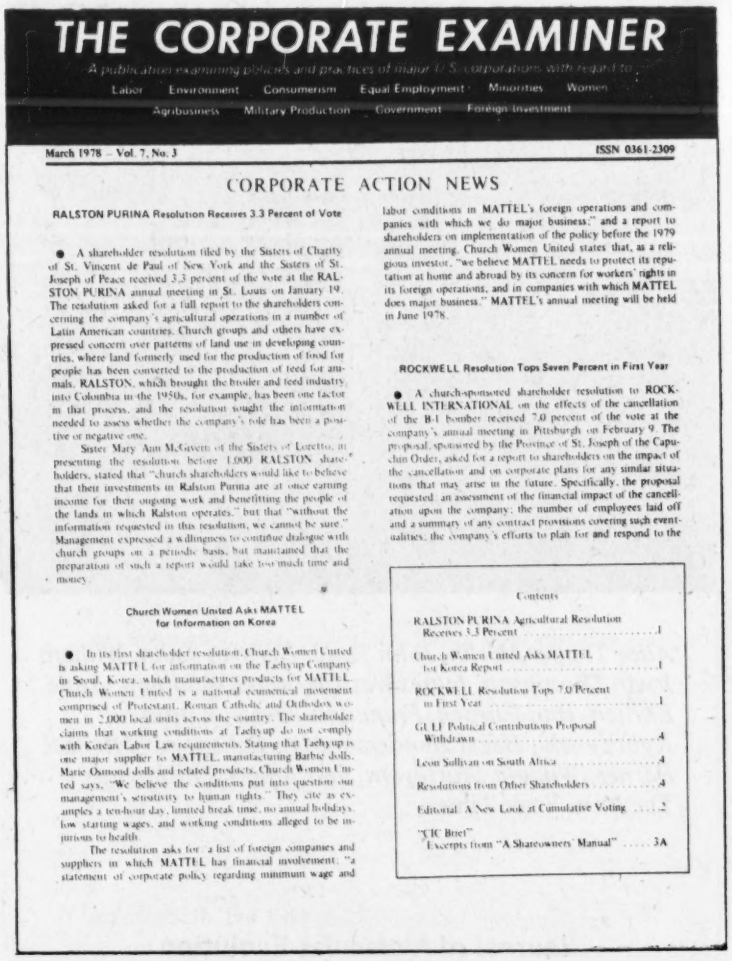
Business & Society Review
$34/yr. (4 issues)

These three are the best publications in my field. They help keep me in touch with the network of corporate responsibility types and what is going on in their various organizations.

The Princeton Center for Alternative Futures – Hazel and Carter Henderson's prolific and insightful analyses of the twilight of the industrial age. Published irregularly by this mom and pop think tank, it provides the thoughts and expressions that I cite and borrow most frequently in my own talks at seminars, etc.

Womens Forum Newsletter – Helps me to keep track of and in touch with this impressive network of women of achievement in New York.

COAC (Council on Adoptive Children) Newsletter, Friends of Children Everywhere, Hi Family – These



THE CORPORATE EXAMINER

A publication examining policies and practices of major U.S. corporations with regard to:

Labor Environment Consumerism Equal Employment Minorities Women
Agribusiness Military Production Government Foreign Investment

March 1978 – Vol. 7, No. 3 ISSN 0361-2309

CORPORATE ACTION NEWS

RALSTON PURINA Resolution Receives 3.3 Percent of Vote

● A shareholder resolution filed by the Sisters of Charity of St. Vincent de Paul of New York and the Sisters of St. Joseph of Peace received 3.3 percent of the vote at the RALSTON PURINA annual meeting in St. Louis on January 19. The resolution asked for a full report to the shareholders concerning the company's agricultural operations in a number of Latin American countries. Church groups and others have expressed concern over patterns of land use in developing countries, where land formerly used for the production of food for people has been converted to the production of feed for animals. RALSTON, which brought the broiler and feed industry into Columbia in the 1950s, for example, has been one factor in that process, and the resolution sought the information needed to assess whether the company's role has been a positive or negative one.

Sister Mary Ann McGivern of the Sisters of Loretto, in presenting the resolution before 1,000 RALSTON shareholders, stated that "church shareholders would like to believe that their investments in Ralston Purina are at once earning income for their outgoing work and benefitting the people of the lands in which Ralston operates," but that "without the information requested in this resolution, we cannot be sure." Management expressed a willingness to continue dialogue with church groups on a periodic basis, but maintained that the preparation of such a report would take too much time and money.

Church Women United Asks MATTEL for Information on Korea

● In its first shareholder resolution, Church Women United is asking MATTEL for information on the Taehyup Company in Seoul, Korea, which manufactures products for MATTEL. Church Women United is a national ecumenical movement comprised of Protestant, Roman Catholic and Orthodox women in 2,000 local units across the country. The shareholder claims that working conditions at Taehyup do not comply with Korean Labor Law requirements. Stating that Taehyup is one major supplier to MATTEL, manufacturing Barbie dolls, Marie Osmond dolls and related products, Church Women United says, "We believe the conditions put into question our management's sensitivity to human rights." They cite as examples a ten-hour day, limited break time, no annual holidays, low starting wages, and working conditions alleged to be injurious to health.

The resolution asks for a list of foreign companies and suppliers in which MATTEL has financial involvement; "a statement of corporate policy regarding minimum wage and labor conditions in MATTEL's foreign operations and companies with which we do major business;" and a report to shareholders on implementation of the policy before the 1979 annual meeting. Church Women United states that, as a religious investor, "we believe MATTEL needs to protect its reputation at home and abroad by its concern for workers' rights in its foreign operations, and in companies with which MATTEL does major business." MATTEL's annual meeting will be held in June 1978.

ROCKWELL Resolution Tops Seven Percent in First Year

● A church-sponsored shareholder resolution to ROCKWELL INTERNATIONAL on the effects of the cancellation of the B-1 bomber received 7.0 percent of the vote at the company's annual meeting in Pittsburgh on February 9. The proposal, sponsored by the Province of St. Joseph of the Capuchin Order, asked for a report to shareholders on the impact of the cancellation and on corporate plans for any similar situations that may arise in the future. Specifically, the proposal requested: an assessment of the financial impact of the cancellation upon the company; the number of employees laid off and a summary of any contract provisions covering such eventualities; the company's efforts to plan for and respond to the

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"CIC Brief" Excerpts from "A Shareowners' Manual" 3A

Alice Tepper Marlin reads **The Corporate Examiner: A publication for church and other organizations and individuals concerned about the social impact of corporations at home and abroad.**

are three excellent and informative newsletters for families that include adopted children, focusing on international and interracial adoptions. All three are excellent sources of a wide range of information, including shared experiences and stories, snippets of advice, key issues pending before Congress and state legislatures for or against which members are informed and advised to lobby, practical information about naturalization, immigration papers, adoption agencies, trends in adoption, research into racial and international adoption, and reports on adoption, foster care, orphanages and legal changes abroad, as well as a myriad of suggestions for ways we can help support children in need around the world, and reasonably reliable reviews of relevant children's books, toys, celebrations of Asian holidays, charter fares, etc. I mark them up and clip these three as soon as they arrive. I expect they will become even more important as the children grow older and read them themselves.

New York Review of Books
$14.50/yr. (22 issues)

This is the last on my list, because I've begun to cheat. Let me confess that while I have a nagging feeling that I should read the **New York Review** from cover to cover, I rarely have time to do so. However, I do skim through it to try and keep up with current books that seem to be immediately relevant to my life and work.

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Michael Murphy reads **Track and Field News.**

JOHN McKNIGHT

Associate Director, Center for Urban Affairs, Northwestern University; author of "Valuable Deficiencies"

I recommend four publications as most useful to me – other than **CQ**!

Manas
$10/yr. (44 issues)

No other publication so consistently identifies the critical choices of our time. Weekly, **Manas** reminds me of "whatsoever things are true."

The Neighborhood Works
$20/yr. (26 issues)

The only practical publication identifying "appropriate technologies" for urban neighborhoods. It is the essential publication for people who are re-creating the city in terms of human technologies.

Institutions Etc.
$22/yr. (12 issues)

A continuing chronicle of the abuses of institutionalized people by professionalized people. Practical alternatives are also reported by the editor, Jerry Miller, who is America's most creative inventor of ways to respect and liberate the capacity of the incapacitated.

The People's Doctor
$18/yr. (12 issues)

A newsletter that consistently documents the hazards of modern medicine and recommends healthful alternatives. The author, Dr. Robert Mendelsohn demonstrates in each issue what it is like to be a professional who has gone straight.

Day Charoudi said that he felt his work was more original in New Mexico where there was not the information overload we seem to suffer in these more plugged-in parts.

– Sim Van der Ryn

MICHAEL MURPHY

Writer, co-founder of Esalen Institute; author of **Gold in the Kingdom** ***and*** **Jacob Atabet**

Scientific American
$18/yr. (12 issues)

I've been thinking of shifting to **Science** to keep up with the world of science, but so far **SA** keeps me well enough informed. I read from one to three articles per issue and scan the rest.

CoEvolution Quarterly
$12/yr. (4 issues)

Several important areas were opened up for me by reading **CQ**.

Track and Field News
$12/yr. (12 issues)

This is the only periodical I read from cover to cover! It contains all important news about world and national class track and field events, all new national and world records, periodical reviews of the best times in various events through history, personal news of leading athletes (how they are training, what their goals are, etc.), assessments of various events, training routines, sports arenas, etc. Because I am especially interested in the human body's capacity for transformation and supernormal performance, this becomes a periodical I cannot do without. To my knowledge, there is nothing so thorough covering any other sport in which world records are being broken with regularity.

Brain/Mind Bulletin
$15/yr. (26 issues)

It only takes about ten minutes to read! And you find out some marvelous things.

The Journal of Transpersonal Psychology
$10/yr. (2 issues)

A reliable forum for some of the best thinking going on now in regard to altered states of consciousness, contemplative disciplines, etc.

These five are the only ones I look at regularly. But I have just resubscribed to the **Journal of Humanistic Psychology** ($10/yr., 4 issues), first cousin to the **Journal of Transpersonal Psychology**, and subscribed for the first time to **Science News** ($15.50/yr., 52 issues). I also enjoy perusing the **National Geographic** ($10/yr., 12 issues) and **Audubon** ($13/yr., 6 issues) sometimes. *[more →]*

Your exercise made me realize that news of the things I'm most interested in come mainly by word of mouth and from some strange old books. That is why I value the Arno Press (3 Park Ave., New York, NY 10016, owned by the **New York Times**), which reprints (not cheaply!) classics like Esdalle's accounts of his operations in India during the 1840s, Schrenck-Notzing's book on materialization phenomena, and Alfred Wallaces speculations about Mind in man's future development. I also am in debt to Henry Dakin for getting so much Russian literature about psychical self-regulation and parapsychology translated.

Robert Ornstein, Herman Kahn, William Burroughs, Paolo Soleri, Peter Vajk, Paul Ehrlich, Witold Rybczynski, Allen Ginsberg and Anne Ehrlich read **Time: The Weekly Newsmagazine**, *for varying reasons.*

GURNEY NORMAN

Fiction writer; author of **Divine Right's Trip, Kinfolks,** *and* **Boone** *(forthcoming)*

Studies In Short Fiction
$9/yr. (4 issues)

A quarterly literary journal devoted exclusively to serious commentary on short fiction. A basic tool for writers, readers and teachers of the short story.

The American Book Review
$4/yr. (6 issues)

A good guide to current books of literary interest published by the small, university, regional, third world, women's and other presses. Editors include William Gass, Ishmael Reed.

The Mountain Eagle
$9/yr. (52 issues)

This is the best weekly community newspaper in America. Published in Whitesburg, Kentucky, it is indispensible reading for all people interested in the Appalachian region. Half the content is by local citizens, reporting on the local life of the community.

The Mountain Review
$5/yr. (4 issues)

A quarterly magazine published by members of the Appalshop Film and JuneAppal Records collective in Whitesburg, Kentucky. The subject is life in the Southern Appalachians. Contains fiction, poetry, essays, and excellent photographs.

Appalachian Heritage
$7.50/yr. (4 issues)

A quarterly that focuses on Southern Appalachian life and culture, very intimate in tone, with a specific interest in Knott County, Kentucky. Stories, poetry, articles, photographs, and frequent reprints from old out-of-print books and magazines. Editors include Al Stewart, Harriette Arnow, James Still.

Appalachian Journal
$6.50/yr. (4 issues)

This quarterly is more specifically a literary quarterly, concerned with the literature of the Southern Appalachians. It is a forum for lively argument on the politics, history, sociology of the mountain region. Contains stories, poetry, reviews as well.

Y'Bird
$5/ single issue

For "the new American readership" interested in literature from and about the many diverse cultures of North America. I was glad to represent the mountain people in an issue that reflected, was by/about, black people, Chinese people, Native Americans, lotsa folks. America as *primarily* a multi-cultural land is the theme. Stories, essays, poetry, reviews, this is one of the main magazines. Published by Ishmael Reed and Al Young.

ROBERT ORNSTEIN

Brain hemisphere research; author of **The Psychology of Consciousness** *and* **The Mind Field**; *director of* **Human Nature** *magazine*

I do hope you will mention, sometime, **Human Nature** ($15/yr., 12 issues), over which I have labored for a couple of years.

Time ($31/yr., 52 issues) — Always reliable on news, and quick. Handsome, too.

Atlas World Press ($16/yr., 12 issues). Synopses of a lot of stuff the insular U.S. doesn't usually get.

New Scientist ($54/yr., 52 issues), **Science News** ($15.50/yr., 52 issues). The usual reasons.

International Herald Tribune ($235/yr., 313 issues). Same reasons as Atlas.

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PLEASE CHECK YOUR ADDRESS LABEL. The numbers after your name stand for the month and year your subscription expires. If it's nearly due, how about sending in $12 today?

The Environmental Biweekly of the Rockies and Great Plains

High Country News

Vol. 11 No. 1 — Lander, Wyoming — Friday, January 12, 1979

Will a tight-fisted Congress be tough on the environment?

by David Crosson

The born of the year is traditionally a time of renewal. Yet as the 96th Congress convenes, Washington's environmentalists appear only cautiously hopeful for their movement's loftiest goals. The prevailing feeling is that the gains of the past decade and a half will be sorely tested by a new Congress well-tuned to demands for fiscal conservatism.

"There is no getting around the political fact that environmental rules are viewed as inflationary," says Michael McCabe, director of the Environmental Study Conference, a congressional information service, and the major concern of the American people is inflation." Advising environmentalists at a recent National Wildlife Federation meeting, McCabe cautioned that "unless we recognize the political and economic realities facing elected officials, it will be hard just to preserve what's on the books and next to impossible to legislate needed new programs.

"Environmental positions stated in all-or-nothing terms will more than likely be ignored," says McCabe, who believes that only a unified, politically sophisticated effort can deflate the "obstructionist" label that has been attached to environmentalists.

Already, the conservation community seems to be constructing a strategy that may result in 1979 being the Year of the Coalition. Not only does the Alaska Coalition remain in place, but also, for the first time, the Washington environmental community has jointly compiled its priorities for the coming year.

Nearly 40 active lobbying organizations participated in the ad hoc group, which was organized by Washington Sierra Club representative Brock Evans. Alaskan lands, endangered species, water projects and RARE II -Roadless Area Review and Evaluation- wilderness designations ap-

1979 — THE YEAR FOR COALITIONS?

pear to be their top four legislative concerns.

MAJOR ISSUES

Environmentalists' hopes are high for passage of a favorable Alaskan National Interest Lands bill. The administration's commitment to austerity bodes well for water project cuts, though the effort will have to contend with what Toby Cooper of Defenders of Wildlife calls "parkbarrel paranoia" — Congress's defensiveness about its traditional powers of the purse. The Endangered Species Act and RARE II wilderness designations appear most menaced.

In the wake of last year's last minute sinking of Alaskan lands legislation by Sen. Mike Gravel (D-Alaska), Kathy Smith of Friends of the Earth and the Alaskan Coalition now sees the political shoe on the other foot. Smith thinks that

continued on page 4.

Indians file suit to block uranium development
...see page 10

RARE II complete
...see page 5

ENVIRONMENTALISTS FOR FULL EMPLOYMENT

ALASKA COALITION

630 C Street, S.E.
Washington, D.C. 20003

"To Preserve Alaska's National Interest Wildlands"

COALITION FOR WATER PROJECT REVIEW

WYOMING'S WILDERNESS HERITAGE
WYOMING WILDERNESS COALITION

James Parsons, Luna Leopold, and Peter Warshall read **High Country News: The Environmental Biweekly of the Rockies and Great Plains.**

Science ($65/yr., 52 issues). Poorly edited, disorganized, terrible analysis, but one has to have it.

Publisher's Weekly ($33/yr., 51 issues).

Perspectives in Biology and Medicine ($10/yr., 4 issues). Useful yeasty stuff. Uneven, boring often. Good for sources for **Human Nature.**

The San Francisco Chronicle ($75/yr., 365 issues).

I'd offer to do some reviews myself, but since I'm in the business, now, it might seem untoward (because I thought **Scientific American, Psych Today, Human Behavior, Natural History** and **Quest** were not so hot, I started my own).

JAMES PARSONS

Geographer, head of Geography Department, U.C. Berkeley

CoEvolution Quarterly
$12/yr. (4 issues)

It's got to come first, since you asked the question. More ideas, more sheer pleasure, more impertinences per issue than anything around. But I don't look at the comix. Keep it up.

Geographical Review
$35/yr. (4 issues)

Well, I'm a geographer, and this keeps me abreast, with its articles and book reviews.

Hispanic American Historical Review
$18/yr. (4 issues)

Latin America is my area and **HAHR** reviews just about everything that's fit to print, since "history" is everything that has happened up to yesterday.

Science
$65/yr. (52 issues)

The Newspaper Wherever I am.

I'm a compulsive newspaper reader, which led quite naturally I sometimes think into my becoming a geographer. How else do you keep up on what's going on around you? I especially like the **Bee** papers (Sacramento, Fresno, Modesto) for agricultural and environmental news from non-metropolitan California. The **L.A. Times** too, for features and foreign (Latin American) coverage. The **New York Times** too, of course, but it's too much. And Herb Caen in the **Chron.**

Audubon
$13/yr. (6 issues)

A really handsome conservationist journal that can be hard to put down when it arrives. Articles, color photography, up-dates on environmental issues everywhere.

Sports Illustrated
$25/yr. (50 issues)

Some of the best writing to be found. Besides I've never been weaned from sports, especially non-professional variety. They define it broadly enough to take in just about everything we do for pleasure.

High Country News
$12/yr. (26 issues)

A rather remarkable regional conservation newspaper that cares about some of the best country there is, the Rocky Mountain states, and what we are doing to it as the energy issue heats up.

Texas Monthly
$12/yr. (12 issues)

I always pick it up whenever I change planes at Dallas or Houston. Some great regional vignettes or profiles (a la **The New Yorker**), and of course Texas is something else anyway.

California Farmer
$6/yr. (24 issues)

To keep abreast of the most exciting, complex, dynamic agriculture on earth. The uncompromising hyper-conservatism of the editorials remind you that people are as complicated as most of the problems they are faced with.

I had a few more here, but this is already too long:

Oryx (of the Fauna Preservation Society, London) — for keeping abreast of what is happening to sea turtles, the Javanese rhino and all the rest of those wonderful creatures that are under our thumb.

Fremontia ($8/yr., 4 issues) of the California Native Plant Society — ditto, for our state's incomparably diverse flora.

Not Man Apart ($10/yr., 6 issues, of Friends of the Earth) — another conservationist broadsheet that I'd not be without. Never afraid to take positions, reflecting the David Brower philosophy. Good reviews.

California Historical Society Quarterly ($25/yr., 4 issues) — as a result of recent improvements a really

high class journal of local history, and I'm a Californian.

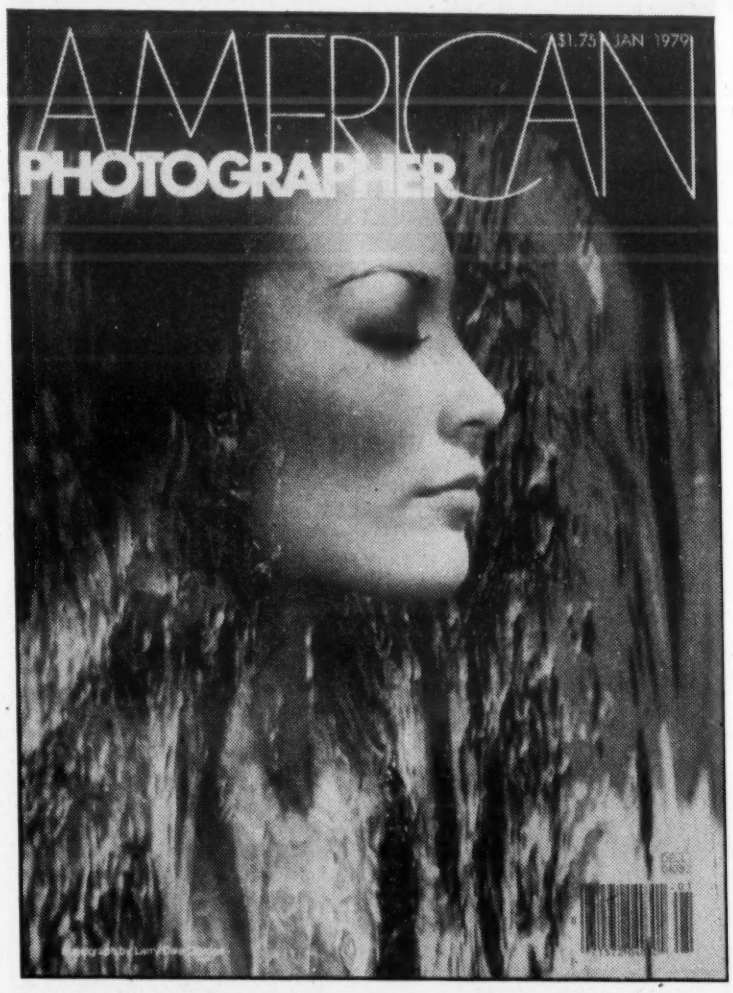
Oil & Gas Journal ($18/yr., 52 issues). To remind myself how the real world operates, and that it is out there working on tangible problems that effect us all. With correspondents all over the earth, it is concerned with much more than oil and gas because almost everything else, from politics and money, to geography and human shortcomings, affect the petroleum industry. It used to be the biggest magazine anywhere and probably still is.

California Geology ($2/yr., 12 issues) — To keep informed of all of those environmental hazards that we have to depend on to keep California impossibly overrun by new arrivals from elsewhere. And it's easily the cheapest thing on the list.

MICHAEL PHILLIPS

Innovator; author of The Seven Laws of Money *and* Good Business *(forthcoming)*

I only read **Science** and **The Wall Street Journal**. I scan the index of **Business Week** ($28.50/yr., 51 issues). All the rest of my news comes from personal friends (and clippings people send me). I look at the monthly star chart and comments in the astronomy calendar. Hope everyone else is not as useless in their replies as I.



George Putz reads **American Photographer.**

GEORGE PUTZ

Writer, co-editor of The Mariner's Catalog

Encounter
$21/yr. (12 issues)

I had my basic say about **Encounter** in last winter's **CQ**. Admiration increases. An intellectual living on a rock in the ocean, I NEED this journal, for it makes me a part of the international community (the relatively small one) that cherishes freedom of ideas in thinking and writing as good as can be found in print. Looking up from somewhere in the midst of the July issue, Stewart said, "Reading this you always feel improved." That's correct.

Scientific American
$18/yr. (12 issues)

The Two Cultures concept introduced by C.P. Snow and which was part and parcel of the intellectual slurry for two decades, is corrupt pottage, except insofar as it describes the *sociology* of schools. It has to do with budgets and faculty rivalry for them. So, like 19th Century gentlemen who *must* not work, humanities and artsies were/are wont to brag about being lousy in math or not knowing anything about science. Art presumably being action, Hegel looks on and says, "There is nothing more dangerous than ignorance in action."

So, for years I've used **Scientific American** as my way of "keeping up." There are at least a couple of articles a month for complete digestion, and the Science and the Citizen roundup usually connects with conversation within hours of reading. However, I'm extremely angry with its change of type-face about a year ago. It has become visually sterile and exhausting. And it does not have enough book reviews. Viewing recent issues of **American Scientist** ($15/yr., 6 issues) belonging to a friend, I note that it is just as eclectic as **Scientific American**, has way more book reviews, and type made for human beings to scan and read too. It's also three bucks less expensive. Too bad after twenty years, but I think I'm going to switch. I'll miss **SA**'s graphics, though. By selling T-shirts, they could keep *their* subscriptions at $15!

Natural History
$10/yr. (10 issues)

Used in two ways: The monthly column "This View of Life" by Stephen Jay Gould, who teaches Biology, Geology and History of Science at Harvard, regularly contributes to (or at least soundly reaffirms) my understanding of how the world works. He explains fundamental issues clearly and always sets them against a background of why anyone ever thought differently. Second, it is written and edited in such a way that my children (ages 10 and 12) seem to get as much out of it as we do. It is one of the few publications we've found that has this quality. A good magazine at a good price from a great institution.

National Fisherman
$10/yr. (12 issues)

I use it, obviously, 'cause I'm on the masthead. But I

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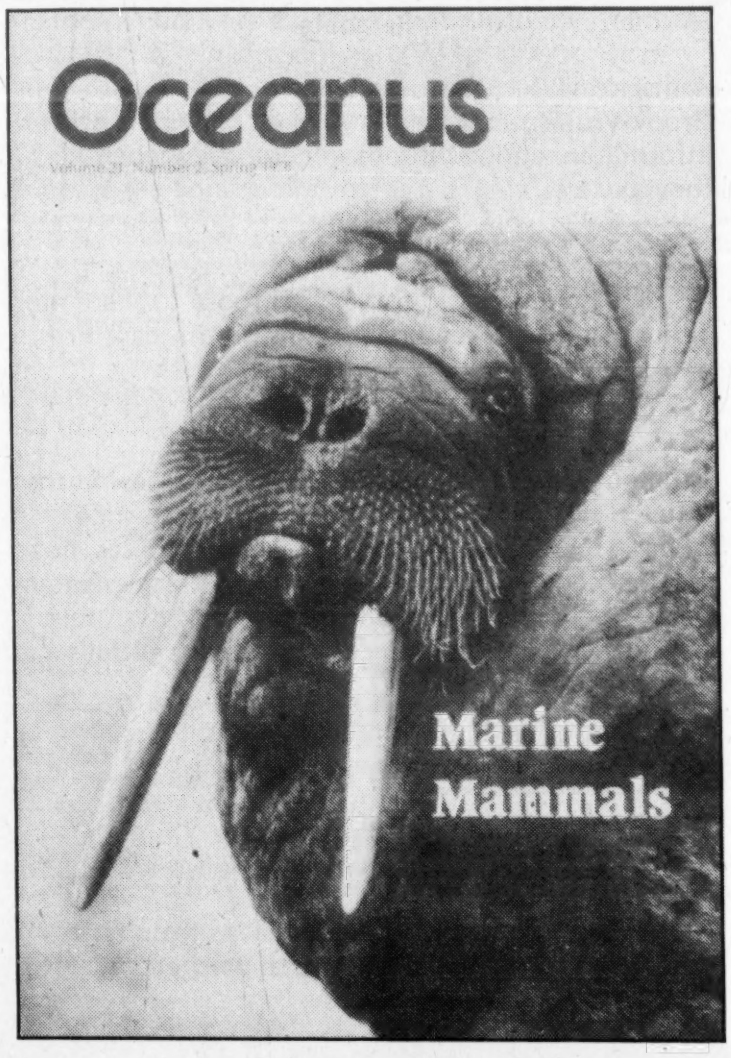

George Putz also reads **Oceanus**.

do not write for it very often. They keep me on because of the leads I regularly call or send in and because I'm editor of a sister publication which has done nice things for their ad department. Surely it is rife with boatness "and the quality which that is about" but recent expansions in commercial fishing (as a result of the 200-mile zone) will be cutting that quality way down in the near future. To deal with this reality, the paper is bifurcating through a new magazine called **Small Boats**, which can be subscribed to separately or, at a bargain, along with the **NF**. This is a good thing and a bad thing. It's good because it will allow **NF** to cover what it ostensibly must (for example, it will get reporters to Washington for the first time and begin to find out things for the fisherman before they are history). It's bad because it takes things apart that ought to remain united. But then I'm just sentimental.

Fine Woodworking
$14/yr. (6 issues)

I try to spend six or eight weeks in the shop each year and have gotten to the point where I can get from concept to object with some equanimity and elan; except for the hard parts. Until this magazine appeared two years ago, the only woodworking publications available in this country were about how to turn your 60 dollars worth of number two pine into birdhouses and ashtrays. This one is for the advanced and professional woodworker, and what a pleasure it is! Beautiful! The best, most difficult clearly.

American Photographer
$18/yr. (12 issues)

I like making photographs. I despise photography magazines. If they are not pornographic forums for the display of useless expensive shit, they are pre-Raphaelite salons for the idly rich. The introductory propaganda for **American Photographer** promised something different and, egad, they've done it! Now a year old, the magazine has come in with revealed growth and maturity in every issue, specifically, a magazine that reflects and actually tries to build a community for serious photographers. There are three regular features using solicited thematic photographs from readers. The careers of at least two photographers, one "classic" the other "new" are covered in detail in each issue. There's nicely covered photographer's gossip (photographers get into really wierd situations). And the technical articles deal with real photographs of distinction and how they were made. It has reawakened my interest in the business and given it some much-missed respect.

Current Anthropology
$25/yr. (5 issues)

American Anthropologist
$50/yr. (4 issues)

Man in the Northeast

In a former life I taught anthropology. From the mid-teens I never wanted to be anything else but an anthropologist. To this day, I get up in the morning being in my heart an anthropologist. I love the field, have maintained my professional memberships for almost twenty years and shall continue to do so. But it is an odd thing to be a secret anthropologist. There is always the feeling of guilt, that christ you ought to be in some school slogging it out with all the other second-rate minds with names like Putz who seem to load the social sciences like what they put these days in ice cream and that's neither ice nor cream. It is a field full of self-defrocked priests and weak egos who didn't know what to be when they grew up. Still, there is no more important field in existence to me, and I read these publications religiously, sadly, and do my own private anthropology with vague futile hopes of vindication someday. (Cellos here.)

Current Anthropology is the foremost international forum for the field. Each issue has at least one, and often as many as three or four feature articles intended to be the most current if not seminal on their subject, printed along with a host of responses from other people qualified to do so, these in turn rejoined by the feature author. Fabulous! The writing is usually rotten, thinking at least a decade out of date, and the emotions revealed often infantile, but still if you are interested in printed argument this is the one. Too, **CA** is the record keeper of the field; contents of all the other journals world wide, all events in anthro and related fields, and extensive notes here and there by, for and to anyone who wants to say something. It is a genuine forum, and the one to get if one can only get one.

American Anthropologist is the official organ of the American Anthropological Association, the Big Kahuna group in North America for the field. Its

editorial policy reflects a something like clubiness among older practitioners of the field, and so the writing is better, even though even more dated generally than **CA**. I like it because its editors still believe that all things human fall within the scope of anthropology's lenses. It resists the splitting of the field into specialties, and so has a reputation of being stodgy and fuzzy-brained among specialists whose major premise is necessarily that less is more. Finally, each issue reviews literally hundreds of books in a score of sub-fields, the principle use I make of the publication.

Man in the Northeast I get because it's polite to get the professional journal for one's own region. Every region has at least one, and it is very useful to keep up because one's friends and acquaintances (everyone in fact) at one time or another has a question about local history and prehistory (Indian stuff) and it's nice to have some answers. Besides, I'm interested in Indian stuff.

Of course there are a host of other journals in the field that one inevitably uses, and I've subscribed to many of them at one time or another. But **CA** and **AA** are the ones generally, and certainly for those who cannot, for reasons of status, deduct the subscription costs from taxable income.

Organic Gardening
$9/yr. (12 issues)

I still use it a little now and then. After a decade of increasingly serious gardening, habit and preferences have become rather fixed and the continuously beginner-oriented articles pall a bit. Still when there is a piece on a variety that is looming in the mid-winter imagination, I'll read it with benefit.

Nautical Magazine
$9/yr. (12 issues)

Serious marine writing, in that this one is published of, by and for real live today mariners. It is not yachty, boaty or nostalgic. It lists all the new ships built world-wide, covers landings, hirings, situations, all reported shipping accidents and losses, and a slop-chest of gossip and anecdote. Necessary perspective against the yachty-boat-nostalgic stuff with which I'm surrounded.

SOME MAGAZINES TO WHICH I'LL SUBSCRIBE JUST AS SOON AS I GET THE BUCKS TO DO SO

Oceanus
$10/yr. (4 issues)

If one likes and takes an interest in Oceanography, and I would even if I didn't have to, one is stuck between glossy sun-baked environmentally-oriented coffee table mags and dreary technical journals; except for **Oceanus**. Here the able editors live in the same buildings as most of the authors and the result is readable and attractive good science.

Nature
$165/yr. airmail (52 issues)

Yeah, well. Hurmph! Puf puf puff.

Verbatim
$5/yr. (4 issues)

Haven't seen it yet but can't wait.

Parabola
$12/yr. (4 issues)

A magazine devoted to myth and ritual published in Brooklyn. Haven't seen it yet, but *have* sent off for information and will shoot in comments when they exist.

Astronomy
$15/yr. (12 issues)

Just sent in a subscription; the purpose to share more periodical literature with the kids, in this case Erik, who's looking up more these days.

The Old-House Journal
$12/yr. (12 issues)

Fabulous! I received a set of these for review in the Maine book we just completed and it's just super. In amber paper stapled form, it covers old houses, how they're made, secrets, materials, tools used, maintenance, history of, gallery pix of, fun trials & tribulations of, restoration projects, contracting pitfalls and secrets, etc., etc., etc.

ROBERT RODALE

Chairman of the Board, Rodale Press, publishers of **Organic Gardening, Prevention,** *and good books.*

I have chosen to tackle this assignment from both a personal and Rodale Press editorial perspective. My

THE LANCET

No. 8099 BOSTON, MASS. AND LONDON · SATURDAY 18 NOVEMBER 1978 VOL. II FOR 1978

ORIGINAL ARTICLES

Colonic Bacterial Activity, Biliary Cholesterol Saturation, and Pathogenesis of Gallstones 1063
I. N. Eaves-Beer, M.R.C.P., Sheila Nutter, S.R.N., S.C.M.

Strong Association between Membranous Nephropathy and Hepatitis-B Surface Antigenæmia in Japanese Children 1065
Yasuo Takeshita, M.D., Masato Tanaka, M.D., Naotoshi Shida, M.D., Yoshio Satake, M.D., Yoshito Sakoda, M.D., Shuzo Matsumoto, M.D.

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THE WHOLE OF THE LITERARY MATTER IN THE LANCET IS COPYRIGHT

Robert Rodale reads **The Lancet,** *a British medical journal.*

mailbox at home is the entry point into my life of about 70 periodicals, but here at our library we get over 600. I have asked many of our editors to tell me which publications they find the most useful. My list for you includes my own selections as well as those of the editors who replied. There was a good deal of repetition in the selection. Also, many of the obvious national publications, like **The New York Times**, **The New Yorker**, and **CoEvolution Quarterly** were mentioned frequently. Admittedly, in making up this list I have tended toward including unusual publications and have skipped over some of the mainliners.

ROBERT RODALE'S PERSONAL LIST:

The Sieve

Not a commercial publication. This is a semi-weekly collection of abstracts from the hundreds of magazines and journals that are received by our library. Circulated to all editors, it calls their attention to useful articles relating to health, medicine, gardening, farming, environment, energy and related areas. From time to time we have thought about making it available to people outside Rodale Press, but have decided not to do that. A few sample issues are attached.

[Looks good, Bob. Why not throw it in as a bonus with your existing magazines? —SB]

Roger Yepsen at Rodale Press reads Trains: The Magazine of Railroading.

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Science
$65/yr. (52 issues)

Of greatest value to me is the list of books received and reviewed. I go over it carefully making selections for our library. In general an excellent publication, but I get the feeling it is not quite as exciting as it was in past years, when there was more ferment in the environment movement and when energy problems were a fresh subject for scientific consideration.

The German Tribune
$14/yr. (52 issues)

Speaking pragmatically, I get more real value out of this tabloid than any other periodical. It is a weekly summary of German newspaper articles, translated into English. At least twice a year, I get a firstrate article or book idea from it. German science has always been quite good and you find a different perspective here on some issues.

The Lancet
$38.50/yr. (26 issues)

The English are more creative medical thinkers than Americans, we have found. There is not only real diversity in **The Lancet**, but quality writing and occasionally some very innovative medical and health ideas.

SELECTED PERIODICALS SELECTIONS OF RODALE PRESS EDITORS:

The Furrow
Free (8 issues)

Mentioned by Ray Wolf of **Organic Gardening**. **The Furrow** is a house organ of John Deere, but many of us here consider it to be far and away the best farm magazine, with the most independent point of view. Ray comments "in the past three years, I've gotten at least three good leads from it and all panned out to be good stories."

HortScience
$25/yr. (4 issues)

Mentioned by Jack Ruttle, planning editor of **Organic Gardening**. This is a rare one Jack says. "Basically a technical journal that still lets the fun in the work show through. **HortScientists**, I know, are really gardeners. Good letters, great book reviews, great news items."

The North American Pomona
$5/yr. (4 issues)

Mentioned by Jack Ruttle again. "These pros and amateurs — Luther Burbanks — all are devoted to searching out great old varieties and new varieties. Reading the Pomona is like reading their mail to one another, good stuff if you grow fruit or nuts."

Trains
$14/yr. (12 issues)

Mentioned by Roger Yepsen of our book editorial department. "There is something of value in this country's railroads, but it's tied up with a mystery that defies explanation. They are the most romantic of machines — even Harlan Hubbard and Thoreau like them. This magazine feeds my fascination with time and place through good writing."

Harrowsmith
$6/yr. (6 issues)

Carol Stoner, head of our book editorial department,

says it is "a magazine somewhat akin to **Country Journal**, but the articles are often more timely, and not as well written. Interesting article in the 15th issue on Amory Lovins and another about the Seymours who are responsible for a back to the land consciousness in the UK."

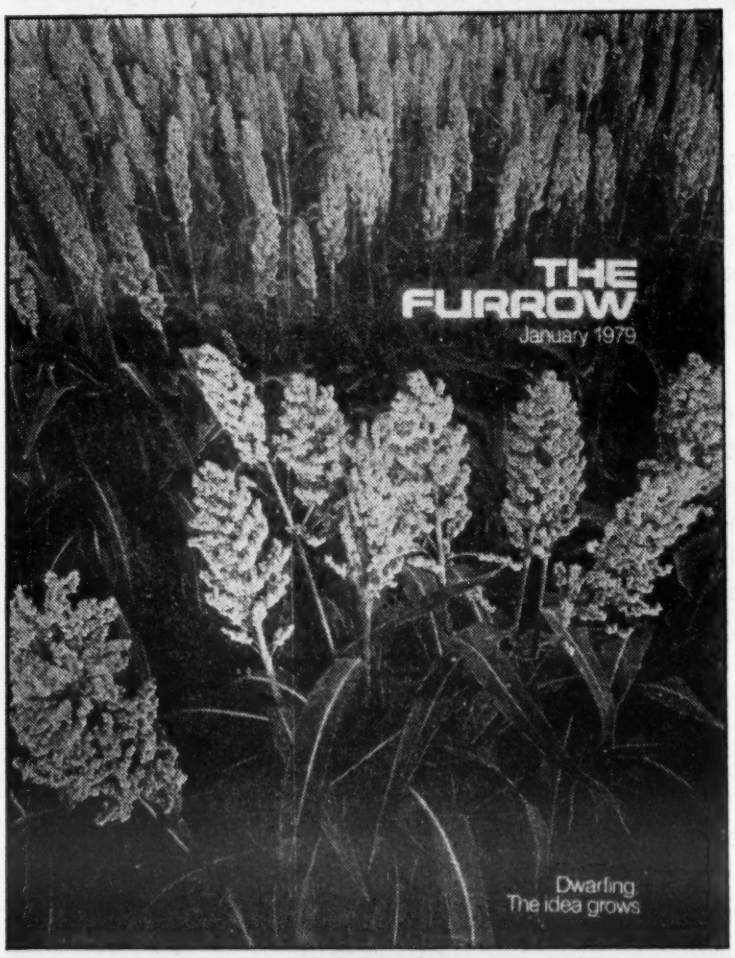
DX News
$15/yr. (32 issues)

Says John Feltman, our **Prevention** Managing Editor, "it is a club newsletter finding and tuning distant radio stations. Contains timely tips, schedules and reports submitted by members. Published by unpaid volunteers." (John spends his evenings trying, and sometimes succeeding, to pick up South American radio stations on the AM band.)

Kronos
$10/yr. (4 issues)

Jeff Cox, **Organic Gardening** Managing Editor, describes it as "Serious scientific debate over Dr. Immanuel Velikovsky's theories, which I enjoy following immensely, especially since our Venus probes have borne out several important predictions Velikovsky made from his hypotheses."

Here are some magazines and journals that were mentioned frequently by Rodale Press editors. **Country Journal** ($12/yr, 12 issues), which Carol Stoner calls "the magazine she likes to spend much time with, because it invites relaxed reading." Many people mention **Travel & Leisure** ($10/yr., 12 issues). The **Prevention** editors gave high marks to **The British Medical Journal** ($56/yr., 52 issues), **The Canadian Medical Association Journal** ($30/yr., 24 issues), **The New England Journal of Medicine** ($25/yr., 52 issues) and **Medical World News** ($25/yr., 26 issues).



Robert Rodale reads **The Furrow.**

WITOLD RYBCZYNSKI

Soft technologist; editor of Goodbye to the Five Gallon Flush *and* The Ecol Operation

Since I don't subscribe to any magazine I tend not to read any regularly (except **CQ**) but use a library. This means I browse and read the ones I want when I want. However, my list would include:

Foreign Affairs
$15/yr. (5 issues)

An establishment publication but eclectic in its choice of authors (Kissinger but also Nyere). Very long and useful list of new books in each issue with brief reviews.

Sunday New York Times
$77.75/yr. (52 issues)

I don't read a daily paper much; this is my replacement.

Economist
$65/yr. (52 issues)

Time Magazine
$31/yr. (52 issues)

The former (British) is by far the better written, though the world-wide resources of the latter are hard to match. Both give access to information rather than hard facts.

New Scientist
$54/yr. (52 issues)

Best access to science and technology developments. Like **Time** it is too brief to really cover a story, but at least you know it's happening. From **New Scientist** you can go to specialized journals to get more information.

Rolling Stone
$18/yr. (26 issues)

A good source for American politics (very occasionally) if you don't mind wading through a lot of glorified fan mail.

Strategy and Tactics
$4/yr. (6 issues)

A good source, from time to time, on contemporary war/political issues. Pragmatic and sometimes with chilling tongue-in-cheek. Interesting even if, like me, you find war games unplayable.

Architectural Design
$47.50/yr. (12 issues)

During the seventies undoubtedly the best architectural journal bar none. It is now going through a bad case of the glossies; perhaps it will return one day; still worth looking at.

Compost Science
$6/yr. (6 issues)

One of the few journals (and this is a scientific journal) that sometimes deals with my own field of small-scale waste disposal.

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MARGO ST. JAMES

Founder of COYOTE (prostitute's union)

Feminist newspapers with national distribution:

Majority Report
$7.50/yr. (26 issues)

Published bi-weekly in New York, this newspaper keeps on going in spite of financial disaster. Perhaps it is because it is from New York, but the style and the approach are different from any other feminist newspaper, and the thinking is often way ahead of the rest of the feminist press.

New Women's Times
$10/yr. (26 issues)

Published bi-weekly in Susan B. Anthony's hometown, **NWT** also publishes the **Feminist Review** six times a year, designed to be an alternative to the **New York Times Book Review Section**, which has not done very well with either feminist or gay books.

Off Our Backs
$12/yr. (11 issues)

Published 11 times a year in Washington, D.C., this national newspaper covers news and issues of concern to women. A recent issue covered in depth both the San Francisco conference on Feminist Perspectives on Pornography, and the New York conference on Obscenity: Degradation of Women versus Right of Free Speech.

The Open Road
An hour's pay, more or less/ yr, issue, month, whatever

Produced by a collective of eight women and men in Vancouver, B.C., who see themselves as anarchists or anarcha-feminists, this newspaper covers a variety of issues from the perspective that a broadly-based anti-authoritarian struggle is emerging across the world.

Local Feminist newspapers:

Feminist Communications
$5/yr. (12 issues)

Plexus
$5/yr. (12 issues)

Sister Advocate
$7.50/yr. (12 issues)

Women's Press
$5/yr.(4 issues)

Magazines:

Chrysalis
$10/yr. (4 issues)

Published four times a year, this journal publishes articles on feminist theory and analysis, poetry, art, and occasionally produces a catalog of sources on a particular issue such as healing. Kathy Barry, Susan Griffin, Audre Lorde and Florence Rush are among the contributors to the magazine.

Ms.
$10/yr. (12 issues)

A mass-produced, large circulation magazine that covers feminist issues, **Ms.** includes reviews of significant books, films, art exhibits, television programs, etc. Also publishes poetry and short stories. **Ms.** was the first large-circulation publication to discuss the Karen Silkwood case.

Quest: A Feminist Quarterly
$9/yr. (4 issues)

Published four times a year, this journal articulates and explores feminist issues in articles and essays written by some of the major theorists and activists in the feminist movement. An important piece on prostitution, by Jackie MacMillan, was published in the Summer 1977 issue (IV:1).

Women: A Journal of Liberation
$5/yr. (4 issues)

Published quarterly, each issue is devoted to one topic, with articles written by relatively unknown women. The most recent issue is devoted to aging. Previous issues have focused on such topics as: how we live and with whom; sexuality; building a new culture; and androgyny. The next one will be devoted to humor and fantasy.

MAJ. GEN. FRANK SCHOBER, JR.

Commander, California National Guard

Harper's
$11.98/yr. (12 issues)

Atlantic Monthly
$13/yr. (12 issues)

Fortune
$24/yr. (26 issues)

Commentary
$12/yr. (4 issues)

The New York Times Literary Supplement
$40/yr. (52 issues)

The New York Times Magazine
$39/yr. (52 issues)

Army (periodical of the Association of the U.S. Army)
$10/yr. (12 issues)

The Military Review (publication of the U.S. Army Command and General Staff College)
$8/yr. (12 issues)

The New Yorker
$24/yr. (52 issues)

Vital Speeches
$12/yr. (24 issues)

Aviation Week and Space Technology
$22.50/yr. (52 issues)

and, of course,

CoEvolution Quarterly
$12/yr. (4 issues)

Margo St. James and Paul Krassner read **Majority Report: The Women's Newspaper.**

DAVID SHETZLINE

Novelist; author of Heckletooth 3 *and* De Ford

A confession. I am a bit of a depressive, rather than a manic – a genetic thing in part – ah well, the skeleton in the closet. Reading, therefore, occasionally has a special purpose. Those times when the Black Dog slips in to bite and I do my Lord Jim, only two things keep me steady. Twelve cups of Valerian root tea or my bedside reading stand. No amount of swimming, reading, etc. works this well.

On that stand you are most likely to find the following.

New York Review of Books
$14.50/yr. (22 issues)

From the late Hannah Arendt to Emma Rothschild, with some of my hairy-chested intellectual heroes like Christopher Lasch. **NYRB** first brought me the word on the new narcissism and goodies like the world armament markets. Often, The First Ever to notice undercurrents and windshifts. Harumpf . . .

New York Times Book Review
$18/yr. (52 issues)

I suspect this has recently become a must for any generalist. A sort of Sears' catalogue of ideas for the thinking person, plus good-to-competent reviews (depending on the reviewer, of course) and all the latest ads for florid popular novels.

The New Yorker
$24/yr. (52 issues)

Often exasperating, patently patrician, nevertheless the Highest Church in creative and descriptive writing. A most balanced sense of humor and a celebrated ability not to take itself too seriously. I suspect that if trying to be gentle in thought and personal style matters at all, one should touch down in these pages at least once a month. The First Place for many popular classics, including **Greening of America**. And usually the most complete word on pop sociological scandals such as the Jonestown Cult.

Oregon
$12/yr. (12 issues)

It manages to pay its way while doing an honorable job of keeping us aware of the particular mischiefs facing the Northwest corner of the world. Irreverent, biting journalism – a winning formula for any place, anywhere.

The American Book Review
$4/yr. (6 issues)

The material, in their words: A "guide to current books of literary interest published by the small, large, university, regional, third world, women's and other presses." Sample thinking: "Reading such poems, one could very easily believe that San Francisco is stuck in a time-warp and has never moved past 1958."

ADAM SMITH (Jerry Goodman)

Writer; author of The Money Game, Supermoney, *and* Powers of Mind

I read the **New York Times** ($150/yr., 365 issues) every day. The only time I hated reading the **New York Times** was the year I spent on the **Times** Editorial Board, because I felt I might have to have something to say on everything in it. Sometimes I find the **Times** suffocating, and I wish there were an alternative, but the strike showed us how complete it is. Its daily "magazine" sections – sports, science, living – are getting very good, and cutting into **New York** ($18/yr., 52 issues), of which, as you remember, I was one of the co-founders.

THE WALL STREET JOURNAL

What's News—

Adam Smith, Michael Phillips, Allen Ginsberg, Alice Tepper Marlin, Herman Kahn, Stewart Brand, Anne Ehrlich and Paul Ehrlich read **The Wall Street Journal**

I read the front page, the center sections of the **Wall Street Journal** ($55/yr., 260 issues). The best features of the journal are the No. 7 column, i.e., front page next to last right, on Mondays, the analyses by Richard Janssen, Alfred Malabre, et al. I read Bartley's editorials and the essays of the contributors. Too much of the business news seems like rewritten PR.

The Princeton Packet ($15/yr., 52 issues), is where I live. It's well designed. I sometimes skim **The Financial Times** (London, $365/yr., 305 issues), to get another angle than the **Journal**. I read Alan Abelson's column in **Barron's** ($36/yr., 52 issues), and I can read the rest of Barron's in less than five minutes.

MAGAZINES

I used to get **The New England Journal of Medicine** ($25/yr., 52 issues), just so I could read Lewis Thomas' wonderful columns. But most of it is beyond me, and Lewis doesn't write often enough, so my subscription has expired. **The Lives of a Cell** is still one of my favorite books.

I get **Forbes** ($15/yr., 24 issues), because its market stuff is chatty and easy to read, and it's gotten better in the last few years. I flip through **Fortune** ($24/yr., $26 issues), and don't mind if I miss it.

I like to flip through the **Economist** ($65/yr., 52 issues), London, again for an exterior point of view, but I don't mind missing and half the time those guys cover up what they don't know with very skillful writing.

Gary Snyder, Sam Keen, Ursula LeGuin, Stewart Brand, Michael Murphy, Peter Warshall, and Robert Ornstein read **Science News**

I don't read **Psychology Today** ($12/yr., 12 issues) as religiously as I used to, but I still get it. Same for the **Journal of Transpersonal Psychology** ($10/yr., 2 issues).

I still read **Institutional Investor** ($52/yr., 12 issues), and **Journal of Portfolio Theory** because I used to be the editor, am on the comp. list, and like to keep up with what the boys are up to.

I read **Publishers Weekly** ($33/yr., 51 issues) for the summary of books coming out, and to see what an archaic and anti-author business the actual business of putting out books is.

I still get **New York** ($18/yr., 52 issues), to see what the mad Australian is doing with the child he spirited away from us.

I get the **New Yorker** ($24/yr., 52 issues). Sometimes excellent, sometimes water-torture writing. The fiction is beginning to show us lagging social mores.

I get both **Harper's** ($12/yr., 12 issues), and **The Atlantic** ($13/yr., 12 issues). One good piece per issue makes it worthwhile.

I get **Foreign Affairs** ($15/yr., 5 issues), as a member of the Council of Foreign Relations. A paper in that journal is likely to make the news six months hence.

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I also have subscriptions to **Esquire** ($9/yr., 12 issues), **The Futurist** ($15/yr., 6 issues), and **The New Republic** ($12/yr., 52 issues). And **CoEvolution Quarterly**.

As I look over the list, it's rather heavy on duty and light on fun. I must do something about that.

Newsweek ($29.95/yr., 52 issues), too, I like the the columns.

A slew of bank letters.

My children are smarter. My son gets **Junior Tennis** and my daughter gets **Dancemagazine**. Those are things they *do.*

GARY SNYDER

Poet; author of Turtle Island, The Old Ways, Earth House Hold, The Back Country, Riprap

I tried **Science** ($65/yr., 52 issues) for a year and simply couldn't keep up with the amount of paper involved, so **Science News** ($15.50/yr., 52 issues), suggested to me by Gale Dick in the Dept. of Physics at the University of Utah, has been my channel to that branch of 20th century reality. I get at least one mind-hit from every issue.

Not Man Apart ($10/yr., 6 issues), from the Friends of the Earth, is not often very pleasant or optimistic reading. But it's the best straightforward tough politically active environmental periodical, and it does have a sense of humor.

Fremontia ($8/yr., 4 issues), the journal of the California Native Plant Society is always a pleasure (also very sharp on endangered habitat and plant species of California) — a pleasure because it takes one right into what it means to be a Californian. True bio-regional proto-mytho-poeia. One can get ecstatic over certain obscure varieties of manzanita.

Dialectical Anthropology ($21.50/yr., 4 issues). The masthead states, "Far from being exhausted, Marxism is still very young, almost in its infancy; it has scarcely begun to develop. It remains, therefore, the philosophy of our time. We cannot go beyond it because we have not gone beyond the circumstances which engendered it." The editor is Stanley Diamond, author of **In Search of the Primitive** (New Brunswick, N.J.: Transaction Books, 1974) [The best critique of civilization so far.]

Pretty technical stuff, and ahead of the pack. Order direct from Elsevier, P.O. Box 211, 1000 AE Amsterdam, the Netherlands. $21.50 a year for individuals; $43.50 for institutions. (How come all those Elsevier publications are so expensive?)

Trade magazines can't lie because, if they did, they'd be of no use to the trade.

— Nicholas Von Hoffman

PAOLO SOLERI
Arcologist

I am letting you down on this one. I am not a regular magazine reader, other than **Time** and **Saturday Review.** It is like asking a grasshopper to send a list of the best-worst weeds. I take in what comes when it comes and I have a lousy memory.

BROTHER DAVID STEINDL-RAST
Benedictine monk, founder of the "Houses of Prayer" movement

National Catholic Reporter
$18/yr (42 issues)

A glance at the headlines gives me an overview of controversial issues in Church and world as seen by committed Christians who are politically awake.

Zur Debatte

"Bavarian" and "catholic" (when spelled with a low-case "c", as it ought to be, for Christ's sake) don't seem to mix too well. Nor does the addition of "Academy" in the title improve the syndrome. And yet these people bring up key topics for our time years before we begin to focus on them this side of the Atlantic.

CoEvolution Quarterly
$12/yr. (4 issues)

In **Sonnets to Orpheus**, Rilke inquires: ". . . is there not, maybe, a place where what would be the language of fishes is spoken *without* them?" As I read it, the **CQ** speaks the language of monks without them. This makes me homesick. But, for the healing of all concerned, that sickness will have to grow worse. I like to expose myself to it.

Catholic Worker
$0.25/yr (9 issues)

This paper still costs one cent per copy, as it did when founded by Christian anarchists half a century ago. It keeps me in touch with Sisters and Brothers who are in-and-out of prison for their commitment. I need that challenge.

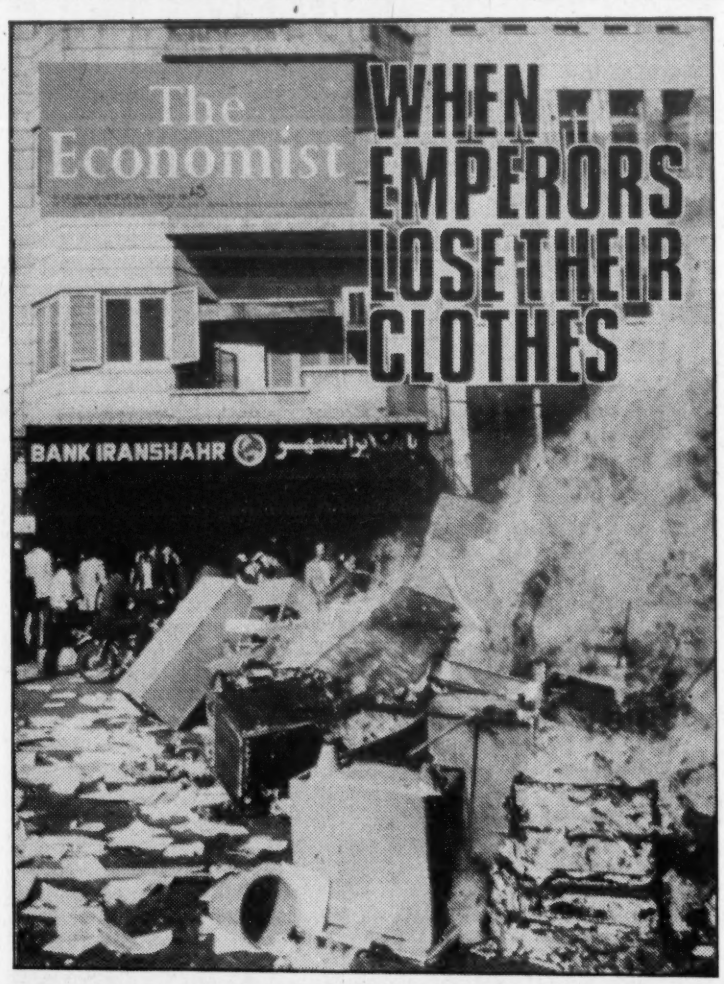
Cross Currents
$6.50/yr. (4 issues)

It's called "A Quarterly Review to explore the implications of Christianity for our time," and for almost three decades now, Joe and Sally Cunneen have piloted this exploration on a broad cultural base, with courage, with vision, and at great personal cost. I can never read it all. But I've never found anything in **Cross Currents** that wasn't worth reading.

Parabola
$12/yr. (4 issues)

When it comes in the mail, I page through it, look at the pictures, enjoy the graphic design. Most of it remains to be read on that leisurely afternoon that's always in the future. But it gives me the delight we take, at a smorgasbord, in the food we leave on the table. Isn't that, too, a legitimate function of a magazine?

Then I watch the shadow of the wild cherry tree passing as slowly as the hand of a clock across that gray boulder and wonder whether reading periodicals is really something on which I want to spend a lot of time.



The Economist, *reviewed by Philip Stewart, Adam Smith, Witold Rybczynski, James Watson, and Herman Kahn.*

PHILIP STEWART
Lecturer, Forestry Department, Oxford University

Scientific American
$18/yr. (12 issues)

Very high quality popularization without skimping of detail. It was my lifeline to new ideas during my seven years in Algeria.

New Scientist
$54/yr. (52 issues)

For free-ranging discussion of controversial developments.

Nature
$165/yr. airmail (52 issues)

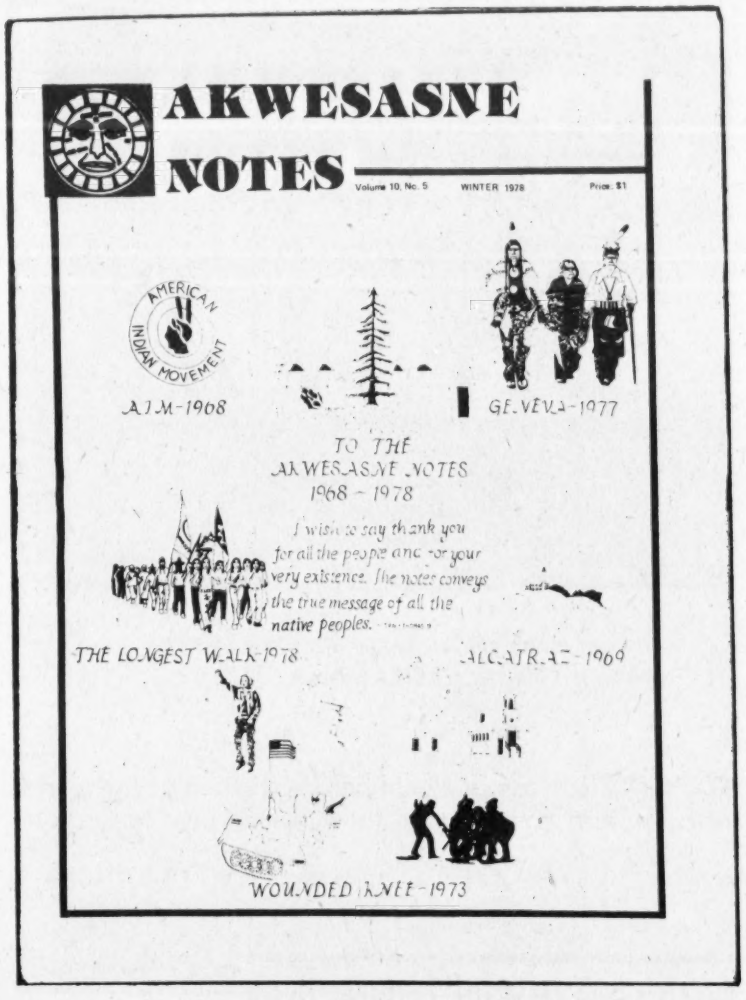
A weekly kaleidoscope of the latest work in a great range of fields, and invaluable for book reviews.

The Economist
$65/yr. (52 issues)

A weekly round-up of news and analysis of human affairs thoroughly wrong-headed (not systemic) but I know their bias and allow for it.

Le Monde
$212/yr. (365 issues)

The best daily paper I know, but I can only afford it



William Sturtevant, Raymond Dasmann, and Paul Winter read **Akwesasne Notes: A Journal for Native and Natural People.**

when in France. Full of background articles and looks at the world through French eyes which I think are often the sharpest ones. Wrong-headed etc (see above).

The Times

My British substitute for **Le Monde** if it still exists (in doubt because of labour dispute). A bit parochial but marvellous readers' letters. Wrong-headed etc.

The Listener

$13.50/yr. (52 issues)

A weekly transcript of the best of British TV and radio programmes. Contains some very high quality articles.

Which?

$3/yr. (12 issues)

The monthly magazine of the British Consumers' Association with description of tests on different makes of goods, financial advice, marvellous do-it-yourself articles. My wife says 'It's so practical, it must be written by women.' Not sold across counter.

Unasylva

$8/yr. (4 issues)

The quarterly periodical of FAO Forestry Department — a fine range of articles on current forestry problems around the world.

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WILLIAM C. STURTEVANT

Anthropologist; curator at National Museum of Natural History; general editor of Handbook of North American Indians *(forthcoming)*

New Yorker

$24/yr. (52 issues)

Profiles, essays, reports, reviews (but now only occasionally fiction) essential to keep both informed and entertained; always an unattainable model for writing style, editing, and proofreading.

Times Literary Supplement

$40/yr. (52 issues)

I know nothing remotely like it in the quality of reviews and reviewers, the range of subjects covered, and the efforts to keep abreast of the literatures in languages other than English. If it dies because of the current strike, I can't imagine how I will fill the gap.

Washington Post

$159.50/yr. (365 issues)

News coverage and photographers especially outstanding as compared to dailies of other cities.

Sunday New York Times

$77.75/yr. (52 issues)

Essential are the Sunday magazine (not a Sunday supplement), book review (incomplete and unbalanced), arts, and travel (often annoying, often amusing) sections. The new Tuesday science section promises to be necessary reading.

Science

$65/yr. (52 issues)

For the economics, politics, sociology, and ethics of science, as well as for science itself.

The Observer

$36.40/yr. (52 issues)

Perhaps not the best of the British intellectual press, but useful to supplement U.S. news sources. Clive James on television, Katharine Whitehorn on social commentary have no equals.

RAIN (Royal Anthropological Institute News)

$10/yr. (6 issues)

Short articles and reviews, at a level between specialized and popularized that U.S. authors and publishers evidently cannot produce.

New York Review of Books

$14.50/yr. (22 issues)

Rather inappropriately titled; presents the views of an interesting clique.

Akwesasne Notes

Donation (5 issues/yr.)

A peculiar thing, quite biased, but a good way to keep current with developments in some quarters of modern North American Indian affairs.

Human Nature

$15/yr. (12 issues)

Has not yet found itself. I subscribe in hopes that it will, because a general journal of the human sciences is badly needed.

SPECIALIZED PERIODICALS

Of 18 specialized journals in various anthropological subfields I subscribe to (plus another 75 or so I scan

in the library), the most useful are: **Anthropology Newsletter, American Anthropologist, Language, Language in Society, Man, American Antiquity.**

BOOKSELLERS' CATALOGS

No single one will suffice; I buy lots of books, but also use these to keep numerous topical bibliography files. Best I know are catalogs from R.M. Weatherford (P.O. Box 3211, Columbus, OH 43210), Cedric L. Robinson (597 Palisado Ave., Windsor, CT 06095), George S. MacManus Co. (1317 Irving St., Philadelphia, PA 19107), Ken Crawford (2735 E. 18th Ave., North St. Paul, MN 55109), E.J. Brill (Leiden, Netherlands), and Martinus Nijhoff (P.O.B. 269, The Hague, Netherlands). I miss the catalogs from Blackwell's (Oxford), Kegan Paul (London), and Bernard Quaritch (London), who have changed their focusses or purged their mailing lists or both.

William Irwin Thompson, Philip Stewart and Francisco Varela read **Le Monde.**

LYNN THOMPSON

Superintendent of Golden Gate National Recreation Area, San Francisco

Fortune
$24/yr. (26 issues)

As a Government bureaucrat it is interesting to view Big Business Bureaucracy and their "efficiency" (?). Enjoy the short biographies and reports on leisure time activities.

Money
$14/yr. (12 issues)

Good hints on personal financial management — provides a comparison scoreboard to show how well or poorly I handle my finances.

Smithsonian
$10/yr. (12 issues)

A wide diversity of articles in all fields — interesting editorial comments.

Audubon
$13/yr. (6 issues)

A visual delight.

Consumer Reports
$11/yr. (12 issues)

Doesn't much change my purchasing habits but I read the comparisons frequently and probably avoid the "not recommended" items.

National Geographic
$10/yr. (12 issues)

A habit since childhood but I've matured to the point that I can discard after reading. Whets my appetite for travel.

San Francisco Chronicle
$75/yr. (365 issues)

For columnists, what's happening in the city, reviews, and TV guide.

New Yorker
$24/yr. (52 issues)

Another habit of many years — some issues fascinate, others put me rapidly to sleep. Remember reading Rachel Carson about a year before the rest of the world noticed, and always hope for a special profile series.

WILLIAM IRWIN THOMPSON

Historian, co-founder of Lindisfarne; author of **At the Edge of History, Passages About Earth, Evil and World Order, Darkness and Scattered Light**

The New Yorker
$24/yr. (52 issues)

The best popular magazine in the world. For Borges or Lem, Steinberg drawings, or "Reporter at Large" essays on cybernetics and family therapy, there is nothing remotely in its class. In our new world of high-tech electronic kitsch and behavioral/science banality, it remains as literate as we used to be.

Books New and Forthcoming

An account with Blackwell's of Oxford is worth it just for the catalogues of new books in whatever field you choose. Since most American bookstores now refuse to single-order paperbacks, Blackwell's provides a service unlike any other — a mailorder service for monks in the new Dark Ages.

The New York Times
$150/yr. (365 issues)

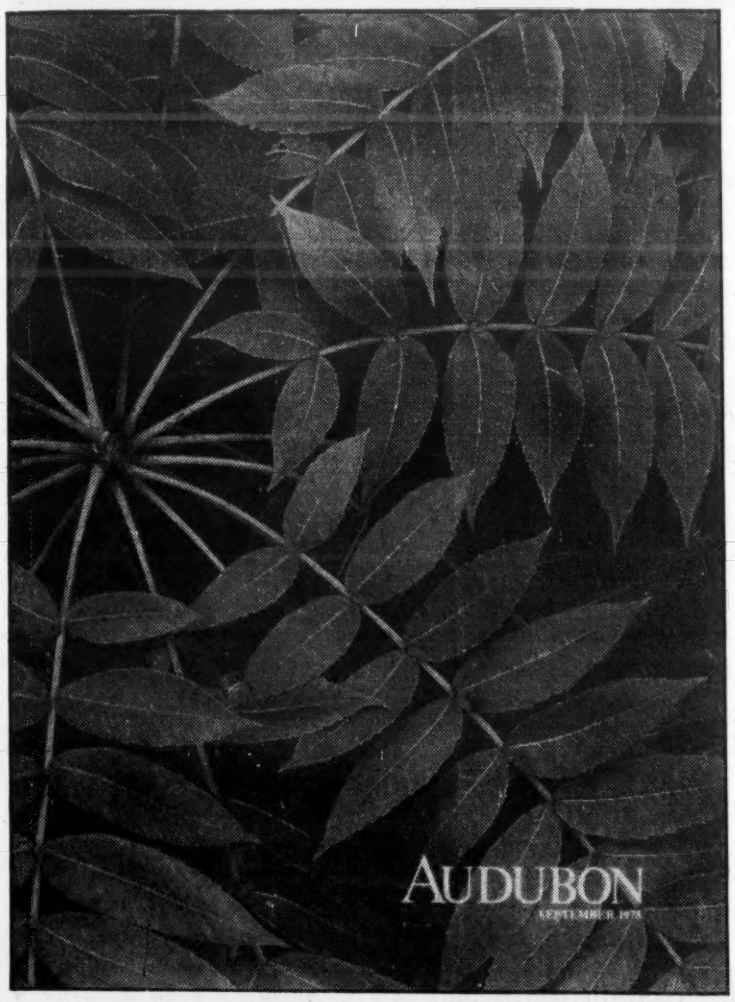
The book review is awful, and the Op-Ed page has gone down since Harrison Salisbury retired, but the daily and weekly science reporting are good.

The London Times Literary Supplement
(Ceased publication)

When I became fed up with the "New York Review of Each Other's Books" and the **N.Y. Times Book Review**, I switched to **TLS**. It too is narrow, but at least it is not ridiculous.

Le Monde
$212/yr. (365 issues)

As **Time** and **Newsweek** fell to the level of **People** magazine, I decided to brush up on my French. It's been worth it for their reporting on Iran. Since Time-Life, C.B.S. and the **N.Y. Times** form an interlocking



Lynn Thompson, J. Baldwin, Luna Leopold, James Parsons, Michael Murphy, Anne Ehrlich, and Paul Winter read **Audubon.**

directorate of trilateral commission propaganda, **Le Monde** has become a necessary antidote.

The CoEvolution Quarterly
$12/yr. (4 issues)

When I stop to consider that I first met John and Nancy Todd, Wendell Berry, Hazel Henderson, and Francisco Varela through **CQ**, I realize how essential it is to me. It is also a bit provincial in its West Coast ethnocentrism. The print is too small, it relies too much on oral culture-electronic journalism – like phone call transcriptions and Whole Earth Jamboree 5-minute raps – and it is too much a reflection of Stewart Brand's personal likes and dislikes, but I still wouldn't think of not subscribing.

Parabola
$12/yr. (4 issues)

Parabola is the mirror-opposite of **CQ**. It is "toney," Manhattan, well-designed in typeface and layout, and very Upper East Side in its Gurdjieff-Jungian ethos. It's been falling off lately and becoming too superficial.

Manas
$10/yr. (44 issues)

Henry Geiger's erudition is awesome, and his reviews of old and overlooked books are very helpful. His instincts and taste are good, but year after year, I find it too monotone. It reads like an exam Blue Book essay of an A student at the Univ. of Chicago in the "Great Books" days of Hutchins.

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New Scientist
$54/yr. (52 issues)

I should have subscribed to **Science** and next year I will. **NS** is too cutesy and journalistic for me. It's good, short reading for the john, though.

Quest
$16/yr. (7 issues)

When Bob Schnayerson and Tony Jones of **Harper's** started **Quest**, I had high hopes, but it's become too much of a dentist's office magazine.

JOHN TODD

Biologist, soft technologist, co-founder of New Alchemy Institute

I am irritated by most periodicals. They are mainly filled with dull, poorly-written articles, and they waste paper. Usually they just make a banal commodity out of printed words. I struggle to whittle from my repertoire the number of magazines I waste my time on – a long-lived attempt to balance my talk-do ratio (an S.B. expression).

My crisis is one of addiction. I am no better than the most down-and-out junkie. If I see a magazine, I head for it. Of late I have stopped subscribing to most all magazines, scientific as well as popular.

Instead, I maniacally cruise the periodical stands in food markets, drugstores and bookshops, with the smug feeling I am kicking my habit. I no longer believe in magazines by name; instead, I look for articles, columns, tidbits that might trigger a response in me. This way I can cull large numbers of magazines ranging from **Popular Science** to poetry magazines. I spend less money now, but I suspect my condition is worsening – as I seek out larger and larger rows and stacks of periodicals to peruse.

I occasionally hit pay dirt: here are a few recent examples.

The Atlantic, Dec. 1978 – Adam Smith's superb essay "Maybe I Am Easily Scared: Energy and Superinflation" was more than worth the price of admission.

The New Yorker, Nov. 6, 1978 – Paul Brodeur in the "Reporter at Large" section taught me a lot about my neighbors the Mashpee Indians. I am grateful to this careful and articulate reporter who also wrote about microwave pollution in his book **The Zapping of America**.

The Country Journal, Dec. 1978 – Wade Green's article on the future of small farms in New England was an outstanding synthesis of biological, social and economic forces. His conclusion that the small farm in the northeast is slated to return was based on a careful gathering of material from all points on the compass of argument.

Countryside, Aug. 1978 – Clovis Heimsath's article "Farm Architecture" captured my imagination. I check this magazine out in the local health food store Amber Waves. **Countryside**'s column "News from Spaceship Earth" is always good – a gold mine of economic nuggets. I like their interest in machinery.

[more →]

Natural History Magazine, Jan. 1979 – Stephen Jay Gould's piece "A Darwinian Paradox" hooked me on that issue. Also, I was interested in what Alan Ternes said about Margaret Mead. Margaret Mead mattered to me.

SCIENTIFIC PERIODICALS:

I have just about stopped reading them. **New Scientist** comes too often and **Scientist** legitimizes ideas for scientists several years after they have already found a happy home in the minds of pioneering workers. (There are notable exceptions to my sweeping remark – just not enough to justify the time it takes to find them on my own.)

Instead, I have adopted the tribal scanning method for scientific papers. I ask scientists I respect to keep an eye out for real news. For example, recently Yale's Ken MacKay sent me a draft of a large manuscript "Evolution on the Level of Populations and Communities" by a South African, David Sloan Wilson; Dan Botkin sent me a draft manuscript, "A New Descriptor for Ecology," which has piqued my interest. Tribes in science make a difference. I am grateful for the help I get. I also am aware that I am missing a lot. I do not know if that matters though.

SUBSCRIPTIONS:

I am back to a bare-bones list.

CoEvolution Quarterly
$12/yr. (4 issues)

Indispensible – thanks S.B.

Blair & Ketchum's **Country Journal**, *read by John Todd, Sym Van der Ryn, and the editors at Rodale Press.*

New York Review of Books
$14.50/yr. (22 issues)

It helps fuel my political, literary and economic interests. Its range is so broad and it is where I find most of the books I end up reading. I discovered there **The Times Atlas of World History**, edited by Geoffrey Barraclough. Nancy gave it to me for Christmas and I am glad. Barraclough's writing for **New York Review** is brilliant – period.

I was mad enough at the sour grapes review of Barbara Tuchman's book **A Distant Mirror** that I bought it for Nancy. What a story!

Commercial Fish Farmer
$12/yr. (6 issues)

I have a column in it, so of course I get it.

Nature Canada
$12/yr. (4 issues)

Canada's national nature magazine – not exciting, but beautifully done and presented.

The New Yorker
$24/yr. (52 issues)

The cartoons make it worthwhile, nay, more than that. The reporting is excellent and detailed. A recent piece on the snail darter was excellent. So was the Corydon, Indiana, story.

National Fisherman
$10/yr. (12 issues)

My boating newspaper.

Wooden Boat
$12/yr. (6 issues)

A magazine with a mission, far better than other North American boating magazines which are awful.

Organic Gardening
$9/yr. (12 issues)

I get it out of loyalty to something in me. After a while, the articles repeat themselves. I am not sure whether it's a two-year, four-year or five-year cycle.

It's a simple formula. Wendell Berry writes for **O.G.** His recent potato article was good.

The Beaver: Magazine of the North
$5/yr. (4 issues)

Quarterly published by the Hudson's Bay Company – out of nostalgia for my arctic days.

The summer issue had an article on "Gardening on Hudson Bay." Gardening began in 1708 under instructions from Governor Fullartine. I only wish there was a comparable magazine for the tropics.

The New York Times Sunday Paper
$77.75/yr. (52 issues)

Paper to start fires with, good economic/business section and "The Week in Review" is how I get my News news. Magazine section articles usually lousy.

Canadian Renewable Energy News
$7/yr. (12 issues)

What **National Fishermen** is for boats and boat people, **Canadian Renewable Energy News** is for soft technology. A monthly, well written newspaper.

I'd better stop – I had thought I had cancelled all my subscriptions.

I have a passion for books. I like periodicals which talk about books.

PETER VAJK

Space futurist, author of Doomsday Has Been Cancelled

I've been mulling over the questions you asked about periodicals I use, and I really can't put them into a linear order of usefulness – it's almost like trying to figure out whether a saw or a lawnmower is more useful to me. I use them both, at different times, for different purposes. So let me instead list the periodicals I use in my work and in my life in several clusters.

1. For technical depth in a wide range of disciplines, I scan **Science** ($65/yr., 52 issues), **Nature** ($165/yr., airmail, 52 issues), and **Physics Today** ($24/yr., 12 issues).

2. For a lighter treatment of many different fields of interest, I read **Scientific American** ($18/yr., 12 issues), **American Scientist** ($15/yr., 6 issues), **Bulletin of the Atomic Scientists** ($18/yr.,10 issues), **Smithsonian** ($10/yr., 12 issues), **Human Nature** ($10/yr., 12 issues), and, of course, **CQ** ($12/yr., 4 issues).

3. For current developments and technical articles on space technology and space utilization, I read **Aviation Week and Space Technology** ($22.50/yr., 52 issues) which also has interesting articles on U.S. foreign policy *vis-a-vis* air transport, technology transport, international trade, and military balance, **Astronautics and Aeronautics** ($38/yr., 11 issues), and the **L-5 News** ($12/yr., 12 issues).

4. For serious coverage of the humanities and of international relations, the **Wilson Quarterly** ($12/yr., 4 issues), is tops; for just international (or transnational) policy issues, I also look at **Foreign Affairs** ($15/yr., 5 issues), and the **Bulletin of the Atomic Scientists** ($18/yr., 10 issues).

5. For entertainment and to stimulate open-ended thinking about the implications of technology for the human condition, I read several science fiction magazines avidly – **Analog** ($10/yr., 12 issues), **Galaxy** ($7.50/yr., 6 issues), **Fantasy and Science Fiction** ($12.50/yr., 12 issues), and (a newer venture whose character still seems to be in formation) **Galileo** ($7.50/yr., 4 issues).

6. In my personal life, I've found **Organic Gardening** ($9/yr., 12 issues), **CQ** ($12/yr., 4 issues), and **Sunset** ($11/yr., 12 issues), useful at times, and on occasion look at the annual buying guide of **Consumer Reports** ($3).

7. For pure esthetic enjoyment, nothing soothes the spirit quite like **Arizona Highways** ($8/yr., 12 issues), although it occasionally stimulates intense wanderlust and/or insane jealousy ("I wish I had taken that picture!").

8. For my awareness of what's being published, the book review sections of **Science**, **American Scientist**, **Scientific American**, and **CQ** are most useful.

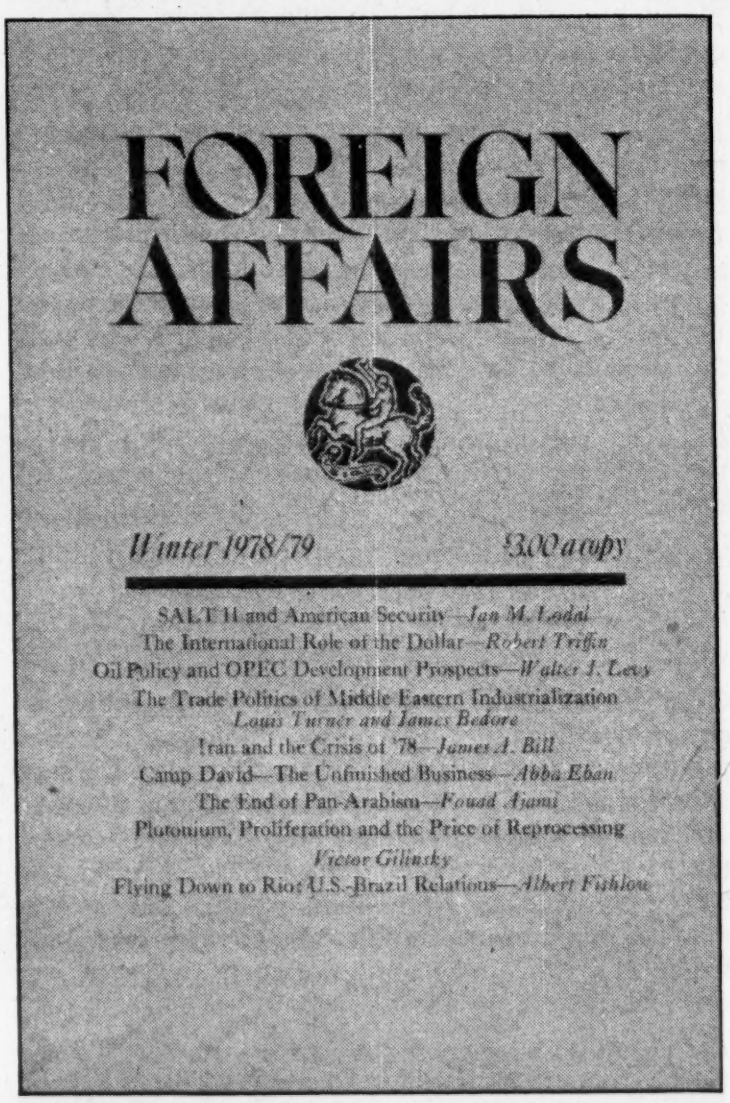
9. Finally, for light reading when I'm tired (or just in the mood for some mental chewing-gum), I read **Reader's Digest** ($8.93/yr., 12 issues), **Saturday Review** ($12/yr., 52 issues), **Time** ($31/yr., 52 issues), or the magazine in the seat pocket of whatever airline I happen to be flying on. Our local newspaper, the **Contra Costa Times**, has a regular column on pets and wildlife by Gary Bogue, who works at the Alexander Lindsay Junior Museum in Walnut Creek, CA. They have an *excellent* program to rescue and rehabilitate (if possible) injured, distressed, or orphaned wild animals, and have had some amazing successes with training orphaned hawks and eagles to hunt so they can be released in the wilderness and survive.

Having listed these periodicals by clusters, an important point is reinforced for me – like any other type of tool, few periodicals are useful *alone*. To build a bookshelf, I need a saw, hammer, drill, screwdrivers, T-square, measuring tape, etc. Likewise, the periodicals I use are often highly synergistic – in fact, I was launched in a new career by the juxtaposition in one week of one issue of **Saturday Review** with an issue of **Scientific American** with an issue of **Physics Today**. (See the preface in my just-published **Doomsday Has Been Cancelled**, Peace Press, Culver City, CA.) I suspect such experiences may be fairly common, if not always so dramatic.

SIM VAN DER RYN

Architect; founder of Farallones Institute; former State Architect of California

In truth I'm a very sporadic reader, meaning that long periods of time go by when I read very few periodicals.



Peter Vajk, Witold Rybczynski and Adam Smith read **Foreign Affairs.**

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In my own "field," architecture and planning, it's particularly grim and I read or should I say glance at, the trade and professional mags almost never.

Truth is that early **WEC** put me on a reading improvement program but it never quite took hold. I'd subscribe to something or other you'd recommend or go on frantic book buying sprees and then the stuff would just pile up. **CoEv** – especially first two years was probably most useful to me – particularly during your Armageddon phase. I haven't been reading it so thoroughly as of late. That grubby little magazine **Organic Gardening** (they've dropped Farming from the title), also had a lot to do with changing my life in that I actually tried doing lots of the things they wrote about. Also Bob Rodale's columns have often been very insightful and full of information on agricultural practices elsewhere.

You didn't say anything about old and defunct periodicals. I have a feeling that they have had a bigger influence on me than stuff today. I grew up a **Life** addict, salivating on Friday afternoons before the postman came and then hiding in my room till dinner to soak up every page. From time to time I buy random old issues and get that same feeling all over again. Also old **National Geographics** which I didn't get as a kid but even discounting their ethnocentrism have certainly given me a good picture of other places, especially since I don't like to travel. You could do worse than spend your money on old **Life**'s and **Geographics**.

In Sacramento I subscribed to lots of mags, thinking that I needed to know what was going on. Took home **Country Journal** ($12/yr., 12 issues) and sometimes **Countryside** ($12/yr., 12 issues), both of which are excellent for people who like such things. Only paper I read regularly was **Christian Science Monitor** ($12/yr., 12 issues), which was also the only one that I consistently found things of enough interest to clip. They are the only newspaper that views energy and resource issues as news – also the background features are generally excellent – beyond the wire service stories.

We were talking the other night and Day Charoudi said that he felt his work was more original in New Mexico where there was not the information overload we seem to suffer from in these more plugged in parts.

Catalogues occupy lots of the time I might otherwise give to periodicals. In the winter if you have a garden the thing to do is dream of Spring. Of course the seed folks know that. If you get a gift certificate, Burpee will mail you their catalogue a month earlier. Now that I'm back in Inverness, Burpee, Bean, and Murray McMurray (chickens from Webster City, Iowa), occupy many evenings of meditation. The commercial catalogues in garden and greenhouse supplies are even more fascinating.

Am thinking about subscribing to the **Sunday NY Times** just so I can find out what's going on in California or at least what the East thinks is important going on here. Last Sunday they had in-depth piece on Peripheral Canal – important news in California seems pretty well blacked out by the McClatchy-Thieriot-Chandler groups.

Maybe we all ought to pledge to not consume more than ten times our own weight per year in virgin papers. I'll borrow the **Times** from Calthorpe who has a subscription.

For the least content of any periodical even if it is free I nominate the **Graduate Review** (Free, 12 issues).

FRANCISCO VARELA

Neuro-epistemologist; author of "Not One, Not Two"

Science
$65/yr. (52 issues)

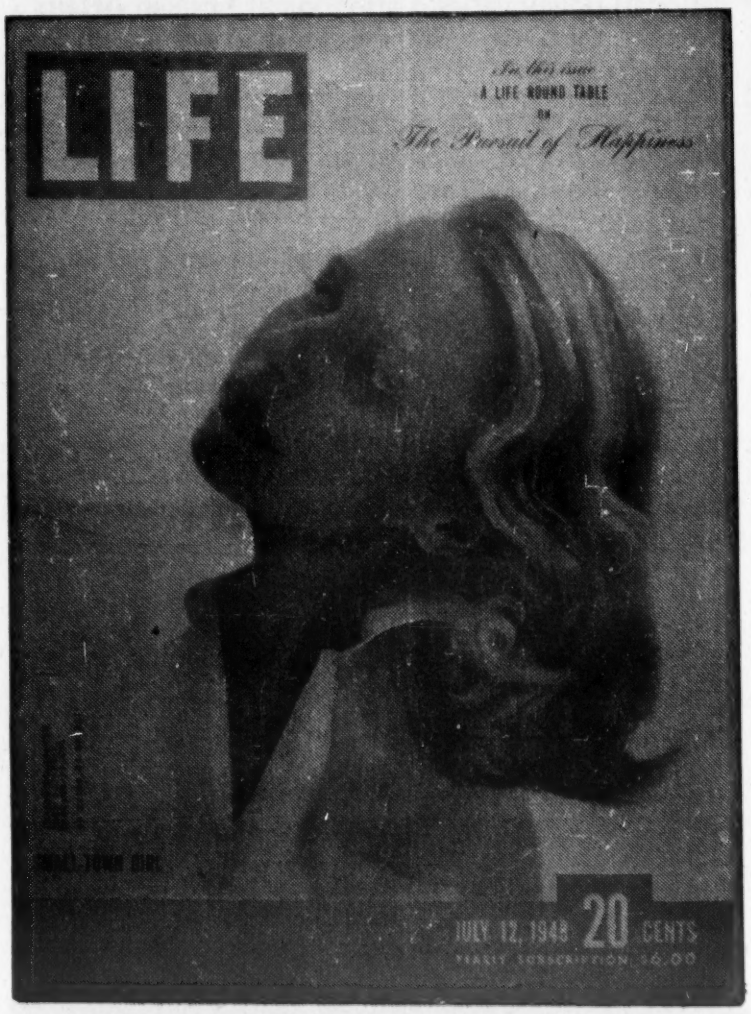
The best and most accurate expression of the scientific life of this country. I read the magazine from cover to cover every week.

Nature
$165/yr. airmail (52 issues)

In my opinion, the best scientific journal in the world. It blends quality with scope, and its influence in the world of science and technology is still unparalleled.

Journal of Neurophysiology
$50/yr. (6 issues)

This is what I read to keep up with what my professional colleagues are doing, specially in the USA and



Sim Van der Ryn and Anne Herbert read the old **Life.** *William Burroughs reads the new one.*

Europe. It has the highest standards in the field, and a pronounced complex of hyper-empiricism.

The New York Times
$150/yr. (365 issues)

I happen to read it every day. It ain't perfect but it is the best there is in delivering world and local news.

Le Monde
$212/yr. (365 issues)

This is where I go when I really need to know what's happening in other parts of the world. By far (one or two orders of magnitude) the best and most thoughtful of all the newspapers I have ever seen.

Behavioral and Brain Sciences
$30/yr. (4 issues)

This is a new journal, but promises a lot. It carries in each issue three or four articles reviewing topics relevant to the study of mind in any of its dimensions, followed by a large number of commentaries and an author's rejoinder. So far I have read virtually the whole of issues 1 and 2.

CoEvolution Quarterly
$12/yr. (4 issues)

You know about this one.

Synthese
$88/yr. (8 issues)

This is the closest I can get to a journal that keeps educating me in the areas of epistemology and philosophy of science. Most of the articles are excellent, and the scope is broad, but it is heavily academic.

Neurosciences Research Program Bulletin
$35/yr. (4 issues)

This organization sets up meetings on special topics and reports them, in the Bulletin, in a semi-narrative style. A very successful way of getting a concise, useful introduction to areas beyond one's specialty.

International Journal of General Systems
$21/yr. (4 issues)

A young magazine (5 volumes as of 1978) that is rapidly becoming the best in the field of cybernetics and systems science. It is surprisingly broad, and non-dogmatic, but, alas, it also reflects the immaturity of this field.

SISTM Newsletter
$10/yr. (4 issues)

A newsletter produced by a very informal association of people of all fields interested in the study of mind (SISTM = Soc. for the Interdisciplinary Study of Mind). The issues have improved consistently, and it seems an interesting way to keep in touch with the more informal grapevine. Has announcements and news items.

Footnote: Interesting: in writing this I realized there is no single magazine for me to keep up with what my fellow buddhists are doing and thinking in this country. Similarly, a broad, vibrant epistemology digest is notoriously absent.

WESTERN EDITION

THE CHRISTIAN SCIENCE MONITOR

Friday January 26 1979 25¢

Even China's leader criticized

Hua concedes missteps during Maoist era

By V. G. Kulkarni
Special to The Christian Science Monitor
Hong Kong

Chairman Hua Kuo-feng had to make a self-criticism at a top-level Chinese Communist Party meeting late last year, according to reliable Chinese sources in Peking.

A central document issued after the third plenary session of the 11th party Central Committee held late December reveals that Chairman Hua conceded mistakes in two areas.

The document which has been circulating among party members down to the county level discloses the self-criticisms made by several leading members of the Central Committee including Chairman Hua, who is said to have conceded that he did not fully support a political movement whose chief plotting road was Vice-Chairman Teng Hsiao-ping and that he went along with the pro-Maoist faction at the ruling group.

Specifically, Chairman Hua is said to have conceded that he did not actively and fully back the line represented by the oft-repeated slogan : Practice is the sole criterion of truth.

This was the keynote of the campaign launched by Mr Teng after his return to power in 1977. Mr Teng and his followers maintained that the purged radical gang of four led by Chairman Mao's widow, Chiang Ching,aimed toward Marxist-Leninist theories to suit their own ends.

In contrast with the ideological purism of the radical quartet, Mr Teng stressed that practice was the sole criterion of verifying Marxist truth. Seeking truth from facts was the favorite theme of Mr Teng, which has been elaborated in the People's Daily and Kuang Ming Daily

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Carter cuts in social security given dim hope

White House aides see stiff opposition on the Hill

By John Dillin
Staff correspondent of The Christian Science Monitor
Washington

Chairman Hua: He had to admit his mistakes

Signal for Soviets?

By Daniel Southerland
Staff correspondent of The Christian Science Monitor
Washington

Inside today...

Carnaby, Reagan in spotlight 3
Hanuck: 'Soviet influence in Iran 22
Tested, affordable homes 15
TV: Hepburn in 'Corn Is Green' 19

Khomeini, Bakhtiar set stage for showdown in Iran

By Geoffrey Godsell
Staff correspondent of The Christian Science Monitor
Tehran, Iran

Superman wins movie war

By Guy Andrews Dillin
Special to The Christian Science Monitor
Washington

BIJOU

Sim Van der Ryn and Herman Kahn read **The Christian Science Monitor.**

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HEINZ VON FOERSTER

Cybernetician, founder of Biological Computer Laboratory, co-editor of Purposive Systems, Music by Computer

Science
$31/yr. (52 issues)

(i) Essential for my professional work (as source as well as outlet);

(ii) Up to date (*letters* published within 4 to 6 weeks; *reports* from 6 to 7 months; *articles* within 6 to 9 months);

(iii) Ramified (science pure; science in action; science and politics; and [finally!] science on science);

(iv) Well read (reliable book reviews — I almost never regretted having bought a book that was recommended by **Science**.)

The New Yorker
$24/yr. (52 issues)

(i) This is my window into the social and literary life of this and other nations;

(ii) the cartoons bring self-recognition, as do the satirical writings;

(iii) the preprinting of forthcoming books (Rachel Carson's **Silent Spring**, McPhee's **Alaska**, etc., etc.)

(iv) the appearance of South American and European writers (Borges, Grass, Lem, etc., etc.), and

(v) the book reviews by Updike, Steiner, Pritchet, etc., make me read it week after week. *[more →]*

The CoEvolution Quarterly
$12/yr. (4 issues)

(i) Tells me what my friends (and others) are up to (read, think, do, plan, fight, argue, ruminate, flop, slip, err, etc., etc.);

(ii) tells me the Why and the How of telling me what my friends (and others) are up to;

(iii) takes the "crucial issues" out from their frames and puts them back to us (that is, to me! I'm part of them; they are part of me; part of my body [I know it; know it not]);

(iv) conspires (in the sense of *conspirare;* breathing together).

Current Anthropology
$12/yr. (4 issues)

(i) Clearing house for emerging socio-politico-cultural concepts ("**CA** Treatment": An article together with the reviews by up to 20 of its reviewers, plus author's reply is published);

(ii) Global Forum (only journal read and contributed to by trans-iron curtain countries [incl. China], partly because one can't "subscribe," but becomes an "Associate of CA" for an annual fee corresponding to the cost of a decent meal in one's country);

(iii) International directory of human resources (annual [?] special issue listing name, current address, field of competence, interest, etc., of all CA's Associates [more than 10,000 (?)]).

Furthermore, my magazine and journal reading diet contains:

Scientific American
$18/yr. (12 issues)

Because of its broad spectrum and particularly because of the two Departments "Mathematical Games" and "Science and the Citizen."

The Annals of the American Academy of Political and Social Sciences
$18/yr. (6 issues)

Because of the editors' choice to devote each issue to a particular topic (population; women; stability; etc.) and to treat it thoroughly, scholarly and well indexed.

NICHOLAS VON HOFFMAN

Writer, syndicated columnist; author of Left at the Post, We Are the People Our Parents Warned Us Against, Multiversity

Broadcasting
$30/yr. (52 issues)

Advertising Age
$12/yr. (52 issues)

Forbes
$15/yr. (24 issues)

Barron's
$36/yr. (52 issues)

Fortune
$24/yr. (26 issues)

There are a lot of other useful publications, but these

Advertising Age

Miller charges A-B ads false

Schlitz to introduce new superpremium

Oil shortage threat puts gasoline ad budgets in jeopardy

Don McGraw hints proxy fight

INAE hears plans for ad push—Page 3

Nicholas Von Hoffman reads **Advertising Age**.

are the kind that get overlooked, although they are among the best if you want to find out what's going on in the organizations and institutions that most effect you. Trade magazines can't lie because, if they did, they'd be of no use to the trade. Thus, for instance, you can learn more about the waste, dishonesty and foolishness of consumer products in **Advertising Age** than you can in many a publication dedicated to protecting the consumer interest.

ANNE WALDMAN

Poet; author of Fast Speaking Woman, Giant Night, Life Notes, Sun the Blond Out

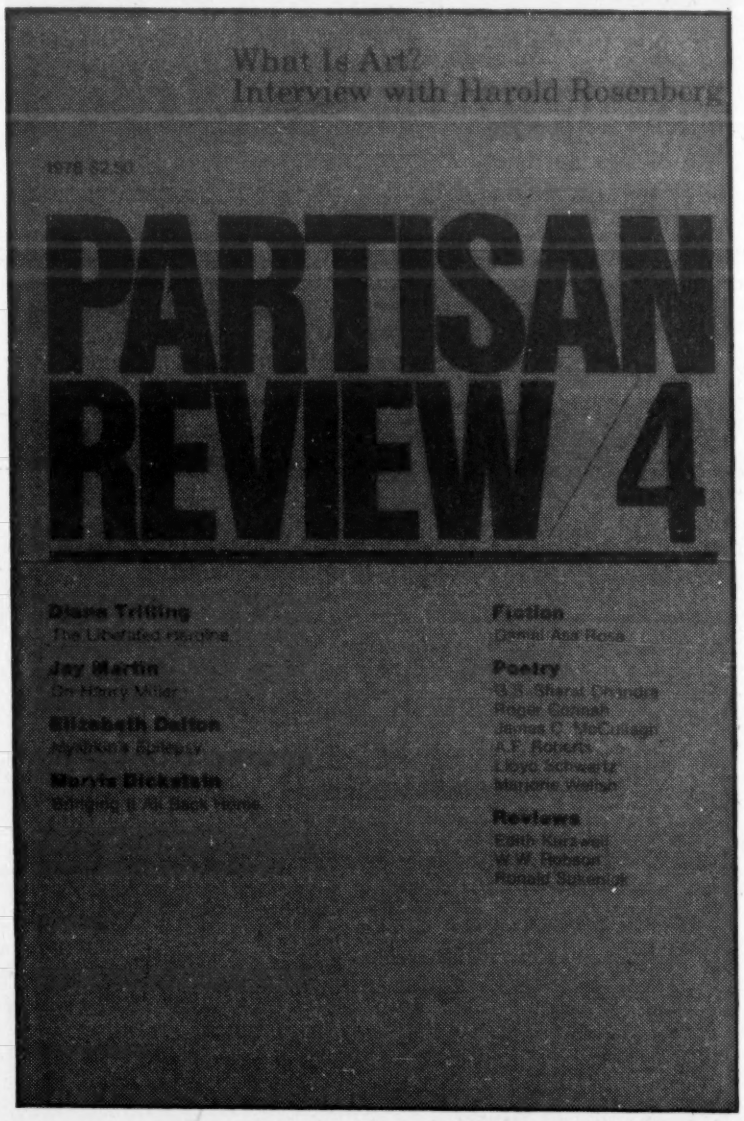
I read many many more *books* than I do periodicals, and am not subscribing to any at present.

New York Times
$150/yr. (365 issues)

To get the most complete (though biased, I'm sure) news on a daily basis. I try to avoid the **Sunday Times** (too bulky) although I make a point of always seeing the Book Review to observe how poetry is being covered – generally not very well, but I've been reviewed there myself and shouldn't complain. There's a new special Science section on Tuesdays.

The New Yorker
$24/yr. (52 issues)

Currently got the best Goings On Listings in that city. Essays and reports are often excellent, and follow Arlene Croce on Dance. Few poems they publish



Anne Waldman and Allen Ginsburg read **Partisan Review.**

too "academic." On the whole a sensible magazine for an insane city.

The Village Voice
$18/yr. (52 issues)

I grew up on Macdougal Street and live on the Lower East Side so this is my turf. First subscribed in high school so maybe continue to buy it for sentimental reasons. Some good political pieces but gone downhill since Murdoch although there's more coverage of poetry events than ever before. Close to home, I worked there briefly as poetry "reader."

Art in America
$19.96/yr. (6 issues)

To keep abreast of bustling art scene, enjoy some of their regular reviewers.

Rolling Stone
$18/yr. (26 issues)

It was my generation now I think they're talking to GREASE crowd. Still some occasional decent sleuth articles. Wouldn't hurt them to publish poetry.

Vogue
$15/yr. (12 issues)

Dig the photography.

MAGAZINE ORDERING INFORMATION p. 124

Times Literary Supplement
$40/yr. (52 issues)

See what's going on in Literary Limey land on bigtime scene. I gave my mother her first subscription and occasionally read her copies. Interesting when they occasionally review Ginsberg.

Partisan Review
$9/yr. (4 issues)

John Ashbery, a great poet, is currently the Poetry Editor.

The Cattle Report

Mail order only, uptodate investigative reporting on the bizarre cattle mutilations.

Alcheringa
$9/yr. (2 issues)

Ethnopoetic magazine.

National Geographic
$10/yr. (12 issues)

Inveterate traveler and enjoy the photographs. Look at friends' copies.

Numerous little poetry magazines which automatically come to me in the mail. Some of the best, currently, **Dodgems, United Artists, Roof** magazine, **Un Poco Loco**. These can be contacted via The Poetry Project, St. Mark's Church In-the-Bowery, 10th St. & 2nd Ave., New York, NY 10003.

Also, **The Poetry Project Newsletter** comes out monthly and has listing of readings in NY, reviews, poems, etc.

New Directions annual anthology, **City Lights Journal**, occasionally check out **Ms.** ($10/yr., 12 issues), **Chrysalis** ($10/yr., 4 issues), and other more "feminist" orientated magazines. **Scientific American** four times a year, **CoEvolution Quarterly** close to top of list!! Really.

PETER WARSHALL

CQ Natural history editor, author of Septic Tank Practices

Science
$65/yr. (52 issues)

To keep up with newest books, politics of science and government, outstanding summary articles in fields of interest (like water resources) and occasional "short reports" of interest.

Environmental Conservation
$71.50/yr. (4 issues)

Best technical reviews in all areas of environmental conservation. Articles like effects of cement dust on growth and yield of olive trees; erosion rates and land-use history on an inland lake; marine parks needed and existing in Italy. International in scope. Better than all those others (**Ambio, Ecologist,** etc.) for me – since I like the nitty-gritty and don't mind (too much) the scientific prose style.

Endangered Species Technical Bulletin
Free (12 issues)

Best up-date on who's still alive, who's going extinct and what's happening to prevent loss of diversity.

[more →]

Otherwise, I glance through others. I like **Natural History** ($10/yr., 10 issues), **New Scientist** ($54/yr., 52 issues), **Science News** ($15.50/yr., 52 issues). Find **Scientific American** ($18/yr., 12 issues) a total drag with more and more scientific ideology and less and less interesting news. I receive lots of technical bulletins like the USGS monthly **Water Resources Review** (Free, 12 issues) which is the only place to summarize groundwater, runoff and rain conditions in the fifty states. I read the **Hearsay News** ($30/yr., 52 issues) like Stewart reads the **Pacific Sun**. Both, essentially bulletin boards of local energy. Like **Econews** ($6/yr., 12 issues) from northern California and **High Country News** ($12/yr., 26 issues) for regional information. Also **Mountain Gazette** ($8/yr., 12 issues). Many birding magazines of limited interest to anyone else.

Whole Foods ($30/yr., 12 issues) is the best of the good health and eating syndrome, read it cover to cover. Replaces **Prevention** ($6.85/yr., 12 issues) and all those others. Kind of the **Wall Street Journal** of the food industry.

Journal of Environmental Health ($15/yr., 6 issues) to see the latest in public health political thinking and conservative ways of dealing with public health problems. Always an interesting perspective on things like chlorination of drinking water, carcinogens, new waste treatment designs and attitudes. Read by many county sanitarians.

When I sit on the toilet I read **Western Birds** ($7.50/yr., 4 issues), **National Geographic** ($10/yr., 12 issues), **National Fisherman** ($10/yr., 12 issues) and my roommate's girlie magazines.

JAMES WATSON

Biochemist, director of Cold Spring Harbor Laboratory; author of The Double Helix *and* Molecular Biology of the Gene

The New York Times
$150/yr. (365 issues)

Almost necessary to start week days, at least on the East Coast. The Sunday version has so little real news that I find it can be skipped without a pang of anxiety.

Nature
$165/yr. airmail (52 issues)

Much the best weekly in science. One or more articles in every issue almost always interest me. Also has very good news reports on current science. The unsigned editorial sections, however, frequently have a useless vacuity. They are seldom deep, and seem adverse to call nonsense by its true name.

Proceedings of the National Academy
$60/yr. (12 issues)

Contains in its monthly issue more than half of the really exciting new facts in biochemistry and molecular biology. Now threatened by its massive length – around 1,000 papers per year – that I seldom have time to look at more than the abstracts.

Cell
$80/yr. (12 issues)

The best of the new batch of monthlies. Still able to publish within 3 to 4 months of receipt. Everyone in Molecular and Cell Biology wants to publish in it, and so it soon may so expand as to lose its reputation of publishing swiftly.

Economist
$65/yr. (52 issues)

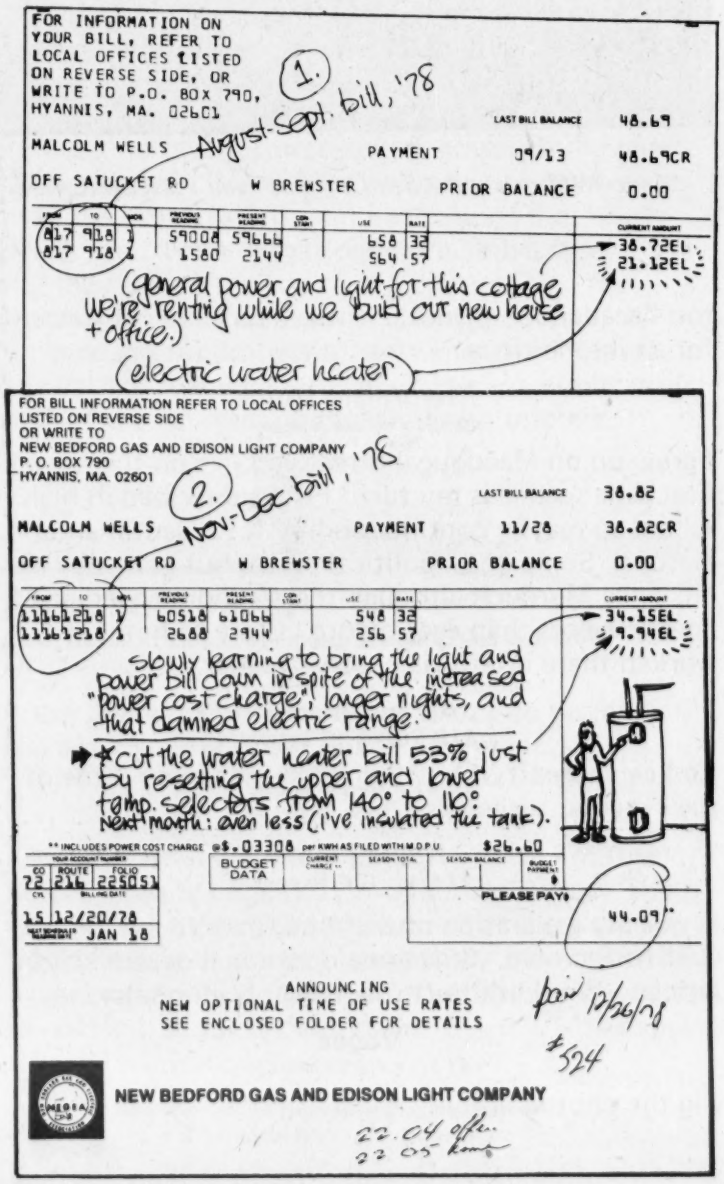
Only way I find to keep in touch with the world outside the States, as **Time** and **Newsweek** tend only to report facts with direct bearing on the States. More stuffy than it seems, but if you don't know what they are writing about, it does not seriously annoy.

MALCOLM WELLS

Architect; author of Underground Architecture *and* How to Buy Solar Heating Without Getting Burnt

CoEvolution Quarterly
$12/yr. (4 issues)

I'm sorry to sound this way but **CQ** just happens to be, for me, my number one choice. My favorite parts:


FOR INFORMATION ON YOUR BILL, REFER TO LOCAL OFFICES LISTED ON REVERSE SIDE, OR WRITE TO P.O. BOX 790, HYANNIS, MA. 02601

(1.) August-Sept. bill, '78

MALCOLM WELLS	LAST BILL BALANCE		48.69
	PAYMENT	09/13	48.69CR
OFF SATUCKET RD W BREWSTER	PRIOR BALANCE		0.00

FROM	TO	MTR	PREVIOUS READING	PRESENT READING	CON. STANT	USE	RATE	CURRENT AMOUNT
817	918	1	59008	59666		658	32	38.72EL
817	918	1	1580	2144		564	57	21.12EL

(general power and light for this cottage we're renting while we build our new house + office.)

(electric water heater)

FOR BILL INFORMATION REFER TO LOCAL OFFICES LISTED ON REVERSE SIDE OR WRITE TO NEW BEDFORD GAS AND EDISON LIGHT COMPANY P. O. BOX 790 HYANNIS, MA. 02601

(2.) Nov.-Dec. bill, '78

MALCOLM WELLS	LAST BILL BALANCE		38.82
	PAYMENT	11/28	38.82CR
OFF SATUCKET RD W BREWSTER	PRIOR BALANCE		0.00

FROM	TO	MTR	PREVIOUS READING	PRESENT READING	CON. STANT	USE	RATE	CURRENT AMOUNT
1116	1218	1	60518	61066		548	32	34.15EL
1116	1218	1	2688	2944		256	57	9.94EL

slowly learning to bring the light and power bill down in spite of the increased "power cost charge", longer nights, and that damned electric range.

* cut the water heater bill 53% just by resetting the upper and lower temp. selectors from 140° to 110°. Next month: even less (I've insulated the tank).

** INCLUDES POWER COST CHARGE @$.03308 per KWH AS FILED WITH M.D.P.U. $26.60

CO	ROUTE	FOLIO
72	216	225051

BILLING DATE 15 12/20/78

NEXT REGULAR READING DATE JAN 18

BUDGET DATA

PLEASE PAY 44.09*

ANNOUNCING NEW OPTIONAL TIME OF USE RATES SEE ENCLOSED FOLDER FOR DETAILS

paid 12/26/78 $524

NEW BEDFORD GAS AND EDISON LIGHT COMPANY

22.04 office
22.05 home

Malcolm Wells reads his electric bill, a monthly.

the brief reviews and commentaries that introduce the items. I wish those reviews were much longer.

The Telephone Directory
and the Yellow Pages

The most used and perhaps most useful of all periodicals these two annuals must save me 50 gallons of gasoline each year by letting my fingers do the driving. (But which uses less energy, a phone call or a letter, *all* things considered? I've never been able to find out.)

My electric bill

This little monthly deals not with world affairs but with the state of my own affairs. It catalogs my energy sins right down to the penny.

The Cape Codder
$13/yr. (104 issues)

Twice a week this beautiful little paper arrives here, and, once a week it features a column, "Soundings," by Robert Finch, easily one of the best writers I've ever come across. If only presidents could see the world as clearly as he does! I see it a little more clearly after each of my weekly Finch fixes.

Building Construction Cost Data
$19.50/yr. (1 issue)

The Robert Snow Means Company of Massachusetts has been publishing this annual estimating handbook for 37 years. It is the cost-calculating bible for U.S. architects and engineers, arranged so simply even they can understand it, so thoroughly you can find almost every building material or construction process in its 362 pages. Widely used by do-it-yourselfers, too.

Solar Age
$20/yr. (12 issues)

Bruce Anderson, alternative energy's whiz kid, has made this the top U.S. solar magazine in just a few years.

Growing Without Schooling
$10/yr. (6 issues)

Why should I care about this? My kids have long since flown away. But what a lift I get from reading what John Holt has to say — on any subject. First attracted to him by his best-of-the-bunch criticisms, in **CQ**, of the space colonies proposals, I began to read every book of his I could find. Now I watch for the arrival of the next **GWS**, the bright hope in education.

Verbatim
$5/yr. (4 issues)

A scholarly little paper salted with fun about words and grammar. Irresistable to any word nut.

Manas
$10/yr. (44 issues)

You said it all.

Organic Gardening
$9/yr. (12 issues)

The number one how-to-do-it book for the kitchen and garden.

Popular Science
$10/yr. (12 issues)

Some of the best-illustrated most clearly presented soft tech information.

Progressive Architecture
$7/yr. (12 issues)

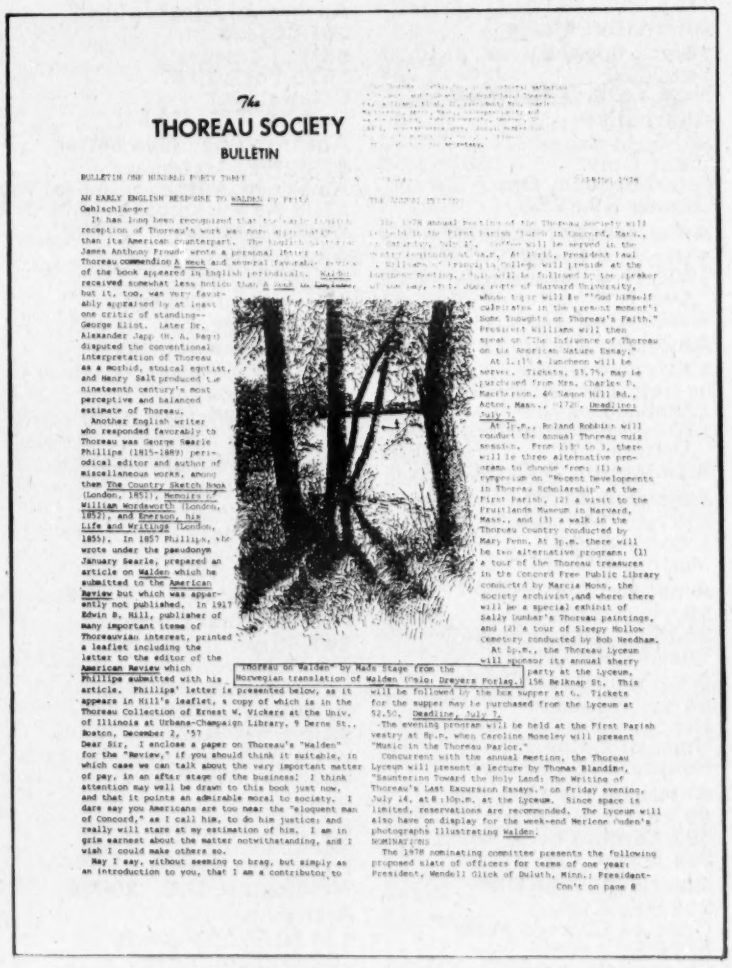
The big architectural magazine. Important more as a guide to where the profession places its values than for its design details. As **PA** goes, so goes the profession.

RAIN
$15/yr. (10 issues)

Museum Notes
Free (26 issues)

I don't even know how I got on the mailing list for this interesting little natural history booklet but I can remember almost every article it's published. You should have read the one about parasites!

And last but by no means least, **Sixty Minutes**, television's weekly news magazine. If I had a film crew — and an editor! — like any that Sixty Minutes assigns to its stories I could have half the homeowners in the U.S. reaching for their shovels after just one segment on underground architecture.



The
THOREAU SOCIETY
BULLETIN

BULLETIN ONE HUNDRED FORTY THREE

AN EARLY ENGLISH RESPONSE TO WALDEN by Fritz Ohlschlaeger

It has long been recognized that the early English reception of Thoreau's work was more appreciative than its American counterpart. The English critic James Anthony Froude wrote a personal letter to Thoreau commending A Week and several favorable reviews of the book appeared in English periodicals. Walden received somewhat less notice than A Week but it, too, was very favorably appraised by at least one critic of standing--George Eliot. Later Dr. Alexander Japp (H. A. Page) disputed the conventional interpretation of Thoreau as a morbid, stoical egotist, and Henry Salt produced the nineteenth century's most perceptive and balanced estimate of Thoreau.

Another English writer who responded favorably to Thoreau was George Searle Phillips (1815-1889) periodical editor and author of miscellaneous works, among them The Country Sketch Book (London, 1851), Memoirs of William Wordsworth (London, 1857), and Emerson, his Life and Writings (London, 1855). In 1857 Phillips, who wrote under the pseudonym January Searle, prepared an article on Walden which he submitted to the American Review but which was apparently not published. In 1917 Edwin B. Hill, publisher of many important items of Thoreauvian interest, printed a leaflet including the letter to the editor of the American Review which Phillips submitted with his article. Phillips' letter is presented below, as it appears in Hill's leaflet, a copy of which is in the Thoreau Collection of Ernest W. Vickers at the Univ. of Illinois at Urbana-Champaign Library. 9 Derne St., Boston, December 2, '57

Dear Sir, I enclose a paper on Thoreau's "Walden" for the "Review," if you should think it suitable, in which case we can talk about the very important matter of pay, in an after stage of the business; I think attention may well be drawn to this book just now, and that it points an admirable moral to society. I dare say you Americans are too near the "eloquent man of Concord," as I call him, to do him justice; and really will stare at my estimation of him. I am in grim earnest about the matter notwithstanding, and I wish I could make others so.

May I say, without seeming to brag, but simply as an introduction to you, that I am a contributor to

"Thoreau on Walden" by Mads Stage from the Norwegian translation of Walden (Oslo: Dreyers Forlag, 156 Holmlag St. This

...will be held at the First Parish vestry at 8p.m. when Caroline Moseley will present "Music in the Thoreau Parlor."

Concurrent with the annual meeting, the Thoreau Lyceum will present a lecture by Thomas Blanding, "Saunterings Toward the Holy Land: The Writing of Thoreau's Last Excursion Essays." on Friday evening, July 14, at 8:30p.m. at the Lyceum. Since space is limited, reservations are recommended. The Lyceum will also have on display for the week-end Marlene Puden's photographs Illustrating Walden.

NOMINATIONS

The 1978 nominating committee presents the following proposed slate of officers for terms of one year: President, Wendell Glick of Duluth, Minn.; President-

Con't on page 8

Paul Winter reads **The Thoreau Society Bulletin**

MAGAZINE ORDERING INFORMATION p. 124

PAUL WINTER

Musician, founder of The Winter Consort

CoEvolution Quarterly
$12/yr. (4 issues)

[Enthusiasm (en-theos: the god within)] Am coming to realize this is the best source of energy, for any crisis. I get from **CQ** more enthusiasm about more things than I knew existed. And it all says to me, "you can do it." It encourages down-home participa-

tion; awakens us from the sleep of spectatordom. I eagerly await each new dose of Vitamin **CQ**.

Akwesasne Notes
Contribution, 5 issues

(A Journal of Native American Peoples.) This sobers me. Reminds me of three things: that the land I live on and love was taken from others by my European forebears; of the Nature-wisdom of the peoples who lived here before; and that there is still genocide happening in the Americas.

Audubon
$10/yr. (6 issues)

This is the most elegant symphony to Nature in print. Whenever I get too wrapped up in indoor over-think, all I need do is open this up and I'm ready to sing again.

Black Box
$22.50/yr. (6 tapes)

Oral poetry; several cassettes a year. Reviving a vital tradition: once you've heard living poetry, the printed page seems incomplete.

Wind Bell
Contribution (Irregular)

Gives me breaths of a fresh air that is becoming increasingly important in my life.

New Age
$12/yr. (12 issues)

East West Journal
$12/yr. (12 issues)

Chronicles of the alternative searching of *my* generation. Both bring many new gifts. **New Age** treats subjects in-depth from many angles. The Gary Snyder interviews in **East West** (June, July, August, 1977) ought to be brought out as a book, included in every school's curriculum, and read into the Congressional Record.

Thoreau Society Bulletin
$ 3/yr. (4 issues)

Keeps me in touch with the guru of my bio-region.

North American Wolf Society

A dedicated survey of research and news about what's going on with my totem, the Wolf, whose fate may well reflect our own.

Humane Society Newsletter

Keeps me from forgetting that animal torture is going on in many places in our society, in the name of science, agriculture, cosmetics, and money. Lest my Outrage Button be turned off in the midst of all my celebrations.

Other meals I enjoy: **National Geographic** ($10/yr., 12 issues), **Smithsonian** ($10/yr., 12 issues), and **Natural History** ($10/yr., 10 issues).

Several times a year, I reserve an entire day to peruse the stock of a large magazine store.

— J. Baldwin

ACCESS TO MAGAZINES

RESEARCH BY PATTY PHELAN

Here is ordering information about the magazines reviewed. A few are not included because we couldn't find out about them. The general subscription price is given; some magazines also have student and institutional rates. (The names under the covers refer to the reviewers.)

Advertising Age
$25/yr., 52 issues
Crain Communications, Inc.
740 Rush Street
Chicago, IL 60611

African Arts
$16/yr., 4 issues
African Studies Center
University of California
Los Angeles, CA 90024

Akwesasne Notes
Contribution, 5 issues
Mohawk Nation
via Roosevelt, NY 13683

Alcheringa
$9/yr., 2 issues
Boston University
Scholarly Pub.
775 Commonwealth Ave.
Boston, MA 02218

Alternative Futures
$8.50/yr., 4 issues
Human Dimensions Center
Rensselaer Polytechnic Inst.
Troy, NY 12181

Alternative Media
$6/yr., 6 issues
Box 777
New York, NY 10010

Alternatives
$5/yr., 4 issues
Trent Univ.
Peterborough, Ont.
Canada K9J 7B8

American Anthropologist
$50/yr., 4 issues
1703 New Hampshire Ave. NW
Washington, D.C. 20009

American Antiquity
$20/yr., 4 issues
Society for American Archaeology
1703 New Hampshire Avenue NW
Washington, D.C. 20009

American Artist
$17/yr., 12 issues
1 Color Court
Marion, OH 43302

American Astrology
$9/yr., 12 issues
2505 N. Alvernon Way
Tucson, AZ 85712

American Book Review
$4/yr., 6 issues
Dept. of English
Univ. of Colorado
Boulder, CO 80309

American Handgunner
$9.95/yr., 6 issues
591 Camino de la Reina
San Diego, CA 92108

American Naturalist
$22/yr., 6 issues
Univ. of Chicago Press
5801 Ellis Ave.
Chicago, IL 60637

American Photographer
$18/yr., 12 issues
P.O. Box 2565
Boulder, CO 80321

American Preservation
$12/yr., 6 issues
Box 2451
Little Rock, AK 72203

American Scientist
$15/yr., 6 issues
345 Whitney Ave.
New Haven, CT 06511

Analog Science Fiction — Science Fact
$10/yr., 12 issues
Conde Nast Pub., Inc.
350 Madison Ave.
New York, NY 10017

Angel Hair Books
Lewis Warsh
Box 718
Lenox, MA 01240

Annals of the American Academy of Political & Social Sciences
$18/yr., 6 issues
3937 Chestnut St.
Philadelphia, PA 19104

Anthropological Journal of Canada
$8/yr., 4 issues
1575 Forlan Dr.
Ottawa, Ont.
Canada K2C OR8

Anthropology Newsletter
$7.50/yr., 10 issues
American Anthropological Assn.
1703 New Hampshire Ave. NW
Washington, D.C. 20009

Appalachian Heritage
$7.50/yr., 4 issues
Alice Lloyd College
Pippa Passes, KY 41844

Appalachian Journal
$6.50/yr., 4 issues
132 Sanford Hall
Appalachian State Univ.
Boone, NC 28608

Applied & Environmental Microbiology
$70/yr., 12 issues
Amer. Society for Microbiology
1913 I St. NW
Washington, D.C. 20006

Architectural Design
$47.50/yr., 12 issues
7-8 Holland Street
London, W8 England

Arizona Highways
$8/yr., 12 issues
2039 W. Lewis Ave.
Phoenix, AZ 85009

Army
$10/yr., 12 issues
Assoc. of the U.S. Army
1529 18th St. NW
Washington, D.C. 20036

Artforum
$22.50/yr., 10 issues
667 Madison Ave.
New York, NY 10021

Art in America
$19.95/yr., 6 issues
542 Pacific Ave.
Marion, OH 43302

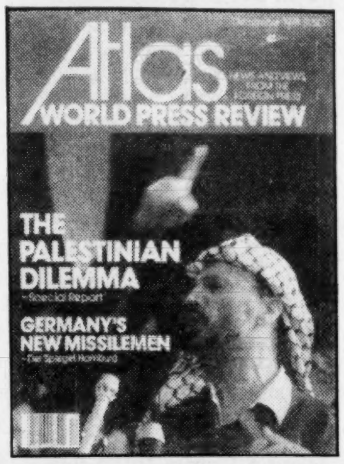
Astronautics & Aeronautics
$38/yr., 11 issues
1290 Avenue of the Americas
New York, NY 10019

Astronomy
$15/yr., 12 issues
411 E. Mason St.
6th Floor
Milwaukee, WI 53202

Audubon
$13/yr., 6 issues
Membership Department
950 Third Ave.
New York, NY 10022

Atlantic Monthly
$13/yr., 12 issues
8 Arlington Street
Boston, MA 02116

Atlas World Press Review
$16/yr., 12 issues
Box 915
Farmingdale, NY 11737



(Krassner, Ornstein)

Aviation Week & Space Technology
$22.50/yr., 52 issues
McGraw-Hill, Inc.
1221 Ave. of the Americas
New York, NY 10020

Barron's
$36/yr., 52 issues
Dow Jones & Co., Inc.
22 Cortlandt Street
New York, NY 10007

The Beaver: Magazine of the North
$5/yr., 4 issues
Hudson Bay House
77 Main Street
Winnipeg, Man.
Canada R3C 2R1

Behavioral & Brain Sciences
$30/yr., 4 issues
Cambridge Univ. Press
Box 789
New Rochelle, NY 10802

Berkeley Barb
$10/yr., 26 issues
Box 1247
Berkeley, CA 94701

Bioscience
$32/yr., 12 issues
American Inst. of Biological Sciences
1401 Wilson Blvd.
Arlington, VA 22209

BioSystems
$43/yr., 4 issues
Elsevier-North Holland Scientific Pub. Co., Ltd.
Box 85
Limerick, Ireland

Black Box
$22.50/yr., 6 tapes
Box 4174
Washington, D.C. 20015

The Black Panther
$6.50/yr., 26 issues
8501 E. 14th St.
Oakland, CA 94621

Blackwell's of Oxford
Broadstreet
Oxford, England

Brain/Mind Bulletin
$15/yr., 26 issues
Interface Press
P.O. Box 42211
Los Angeles, CA 90042

British Medical Journal
$56/yr., 52 issues
1172 Commonwealth Avenue
Boston, MA 02134

Broadcasting
$30/yr., 52 issues
1735 DeSales St. NW
Washington, D.C. 20036

Bulletin of the Atomic Scientists
$18/yr., 10 issues
1020 - 24 E. 58 St.
Chicago, IL 60637

Business & Society Review
$34/yr., 4 issues
Warren, Gorham & Lamont
210 South Street
Boston, MA 02111

Business News
Free, 12 issues
Euro Publications Ltd.
31 Churchill Way
Cardiff, Glamorgan
Wales CF1 4HE

Business Week
$28.50/yr., 51 issues
McGraw Hill
1221 Ave. of the Americas
New York, NY 10020

California Farmer
$6/yr., 24 issues
(in 3 editions: Northern, Southern & Central Valley)
83 Stevenson Street
San Francisco, CA 94105

California Geology
$2/yr., 12 issues
Division of Mines & Geology
1416 Ninth St. Rm. 1341
Sacramento, CA 95814

California Historical Society Quarterly
$25/yr., 4 issues
2090 Jackson Street
San Francisco, CA 94109

Canadian Medical Journal
$30/yr., 24 issues
Canadian Medical Assn.
Box 8650
Attawa, Ont.
Canada K1G 0G8

Canadian Renewable Energy News
$7/yr., 12 issues
Box 4869 Station E
Ottawa, Ont.
Canada K1S 5B4

The Cape Codder
$13/yr., 104 issues
Namskaket Rd.
Orleans, MA 02653

Cascade
$10/yr., 10 issues
Cascadian Regional Library
454 Willamette St.
Box 1942
Eugene, OR 97214

Catholic Worker
$0.25/yr., 9 issues
36 East First St.
New York, NY 10003

Cell
$80/yr., 12 issues
MIT Press
28 Carleton St.
Cambridge, MA 02142

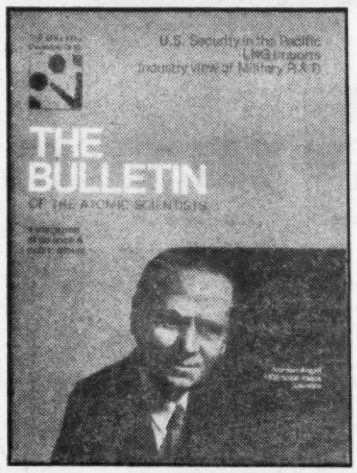
Ceres
$45/yr., 6 issues
Universidade Federal de Vicosa
Vicosa, Minas Gerais.
Brazil

Chemtech
$18/yr., 12 issues
American Chemical Soc.
1155 16th St. NW
Washington, D.C. 20036

Chicago Review
$10/yr., 4 issues
M. Marks
Univ. of Chicago
Faculty Exchange Box C
Chicago, IL 60637

Christian Science Monitor
$45/yr., 260 issues
Box 125
Astor Station
Boston, MA 02123

Chrysalis
$10/yr., 4 issues
635 S. Westlake Ave.
Los Angeles, CA 90057



(Vajk, P. Ehrlich, A. Ehrlich)

City Lights Journal
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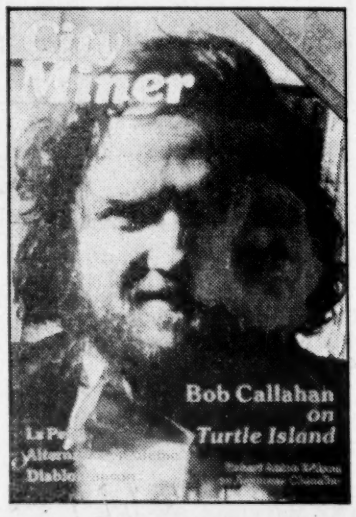

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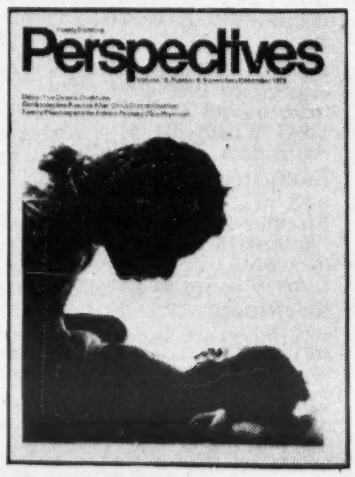

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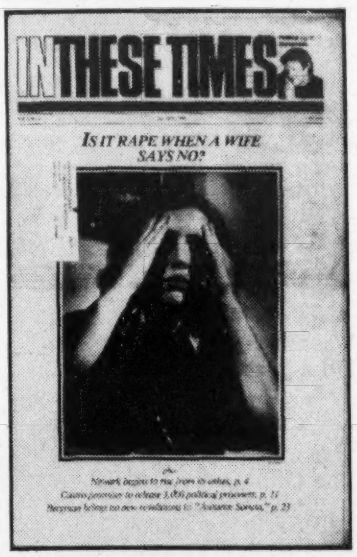

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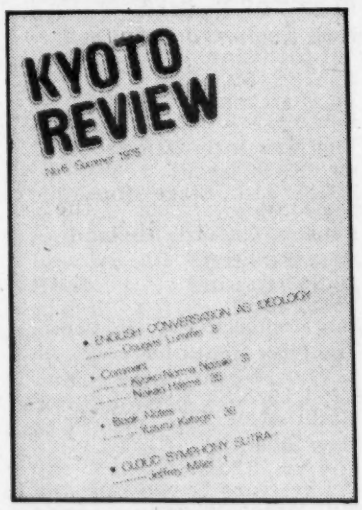

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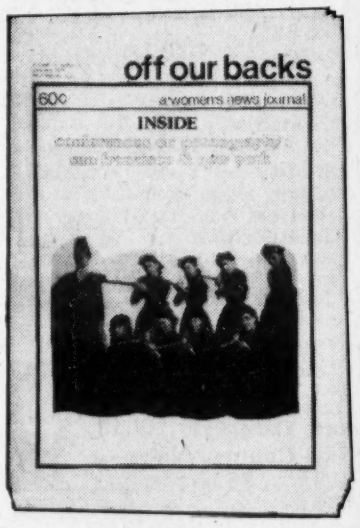

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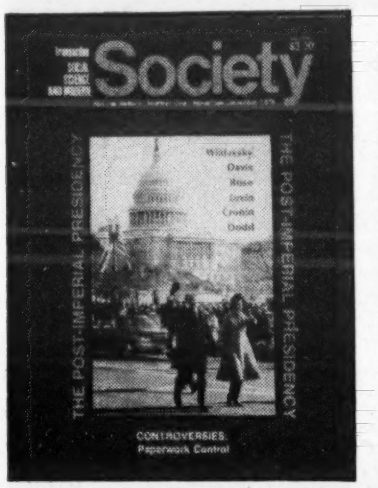

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SUNY-Geneseo
Geneseo, NY 14454

Time
$31/yr., 52 issues
541 N. Fairbanks Court
Chicago, IL 60611

The Times Literary Supplement
Not currently published due to labor dispute
$40/yr., 52 issues
Times Newspapers, Ltd.
Box No. 7
New Printing House Square
Gray's Inn Rd.
London WC1X 8EZ
England

Track & Field News
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1350 Avenue of the Americas
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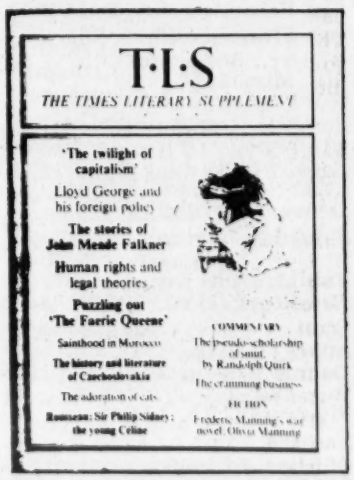

The Times Literary Supplement was read by Ginsburg, Waldman, Sturtevant, Schober, Wm. I. Thompson, Le Guin.

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(St. James, Callenbach, Waldman, A. Ehrlich)

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Washington, D.C. 20003

Washington Journalism Review
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Washington, D.C. 20007

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Washington, D.C. 20071

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U.S. Geological Survey
Reston, VA 22092

Western Birds
$7.50/yr., 4 issues
376 Greenwood Beach Rd.
Tiburon, CA 94920

Which?
$3/yr., 12 issues
Consumers Association
14 Buckingham St.
London WC2N 6DS
England

Whole Foods
$30/yr., 12 issues
2219 Main Ave.
Berkeley, CA 94707

Wilson Quarterly
$12/yr., 4 issues
Box 2450
Greenwich, CT 06830

WIN Magazine
$15/yr., 44 issues
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Wind Bell
Contribution, irregular
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300 Page Street
San Francisco, CA 94102

Wings
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Institute for the Development of the Harmonious Human Beings, Inc.
Box 370
Nevada City, CA 95959

Women: A Journal of Liberation
$5/yr., 4 issues
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Baltimore, MD 21218

Women's Press
$5/yr., 12 issues
Box 562
Eugene, OR 97401

(Waldman)

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New Brunswick, NJ, 08903

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Economic Research Service
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$5/single issue
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Berkeley, CA 94704

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$.25/issue, irregular
Box 392
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Berkeley, CA 94704

Zap Comix
Print Mint
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Berkeley, CA 94710

Zodiac News Service
$5/yr., 52 issues
950 Howard St.
San Francisco, CA 94103

Zur debatte
Katholische Akademie in Bayern
Mandlstasse 23,
Postfach 40 10 08
8000 Munchen 40
Austria ■

Reviewing Magazines

About the only time one magazine notes in print the existence of another is when the other is ceasing to exist. Then the surviving magazine says, in a paragraph or six pages, "Tsk tsk," pisses on the grave, knocks wood, and turns attention to reviewing all the new books, films, plays, TV shows, and records.

I got to noticing this because **CoEvolution Quarterly** *in its five years has been reviewed nationally a grand total of once and a half. One was on Bill Katz' fine page in* **Library Journal** *(see below). The other was a* **New Scientist** *writer who had to pretend he was reviewing our book* **Soft Tech** *and slipped in a few comments about the magazine.*

Suspicious, eh? Also dumb. People are interested in hearing about new magazines and they're likely to enjoy watching one magazine wax bitchy or enthusiastic about another — the same reason one enjoys "The New York Review of Each Other's Books."

Also irresponsible. The only way magazines can gain readers now is: 1) too quickly by direct mail advertising, and 2) too slowly by word-of-mouth. Everyone in the business jokes about the vapid puff-bombs like **Intellectual Digest** *and worthy-but-dead-at-age-Vol. 1, No. 1 creative journals, and no one does much about it. As a partial result magazines continue to rely primarily on their advertising for financial survival, and the readers suffer because they are edited for as product buyers rather than magazine buyers. The other result is that good magazines die young almost by definition.*

Well, OK. We're going to fix all that up. We're starting a magazine-reviewing section in **CQ**. *In our minor league fashion we shall try to take note of new magazines starting, focusing mainly on their content range and ambitions. Once they've got their legs we'll try to review what they've achieved in the way of ongoing quality. New magazines: send us your stuff.*

That's the service end. The enjoyment end for us is to acerbically, or admiringly, review the lame-o dreck on the mass market as well as the pillar-of-the-civilization stuff. Once our circulation has doubled because of this fabulously popular feature, other magazines will institute similar departments, and everything will be better.

Like the reviews, the division of glyphic assessment (using R. Crumb's little men) into Content, Style, and Consequence is arbitrary. By Content we mean the range, depth, and selection of what the magazine tells — is the stuff interesting? Style is somewhat format, somewhat attitude, somewhat editing (flat, domineering, adventurous, rich texture, or what), and the rest indefinable. Consequence is so what. In Bateson's terms, does the difference of the magazine make a difference in the world — does it inform? And is that good and useful?

I wonder if paying this kind of attention (starting on the next page) will make us improve our own act.

—SB

Magazines for Libraries

You don't believe us? You shouldn't — we're upstarts. Check with the old hands at your library — Bill Katz and Berry Richards' working tome of magazine evaluation. They cover 6,500 periodicals "which the editors and contributors believe to be the best of the more than 65,000 titles now available."

—SB
[Suggested by Michael O. Engel]

Magazines for Libraries
Bill Katz and
Berry G. Richards
1978; 937 pp.
$35 postpaid

from:
Bowker Fulfillment Dept.
Box 1807
Ann Arbor, MI 48106

People. 1974. w. $31. Time Inc., Time-Life Bldg., Rockefeller Center, New York, NY 10020. Illus., adv. Circ: 2,000,000.

Aud: Ga.

Each issue features about a dozen or more people who have some claim to television, political, motion picture, or you-name-it fame. Often enough the fame is getting yourself into *People*. There are numerous photographs of indifferent proportions and just as indifferent and sparse prose. It is a terrible magazine, with a sure formula for success. The formula is gossip and sensation packaged neatly so the average American is not ashamed to have it seen on the coffee table. A much better bet is the *National Enquirer*. Still, thanks to middle-class acceptance of *People*, and its harmless entertainment value, it can be recommended for libraries.

•

Access; the index to little magazines. 1977. a. $50. John Burke. Gaylord Professional Publns., P.O. Box 61, Syracuse, NY 13201.

Now that Swallow Press has apparently given up on current issues of *Index to Little Magazines* (which now covers 1943-1969), *Access* comes to the rescue. This time, as with *Access* to popular periodicals, there is a split index: author, 133 pages; title (but no nonfiction), 126 pages; subject, 30 pages. There are about 75 titles indexed. The selection of titles is good. Gaylord will supply the titles on microfilm (with the index) for $300.

•

CoEvolution Quarterly. 1974. q. $8. Stewart Brand. Point, P.O. Box 428, Sausalito, Calif. 94965. Illus. Circ: 17,000.

Indexed: NPI. *Bk. rev:* Numerous. *Aud:* Hs, Ga, Ac.

Published by the founder and editor of the *Whole Earth Catalog*, this is a standard format, 140- to 200-page magazine. Contents follow the familiar *Whole Earth* approach, e.g., a mixture of articles, comments, and detailed descriptions of hundreds of items from books and magazines to miniature flutes. The purpose is to alert citizens to causes and information sources that will improve their individual lifestyle and the lifestyle of the community. There are numerous illustrations, notes about a variety of materials, and accurate bibliographical data given for publications. As a nonprofit publisher, Brand accepts no advertising. It is difficult to overpraise what has become the extension of a publishing legend, but the quarterly can be recommended without reservation for all types and sizes of libraries.

Contents Style Consequence

Interview

Self-consciousness as a fine art. The interview is indeed the most engrossing print form in current decades — it's the only thing that saves such otherwise drab magazines as Playboy, Psychology Today, *and* Mother Earth News. *Andy Warhol's* Interview *really consists entirely of interviews with famous people by interesting people. It soars with the medium. None of the labor of working up an interview shows. It looks effortless, like conversation.*

What the people talk about is what people talk about — a lot of self-preoccupation, some fine wit, and occasional real news and insight. One friend of mine reads Interview *just for Fran Lebowitz' liverish column on the last page.*

Interview*'s format is brilliant — oversize newsprint tabloid, rotogravure color cover, all b & w within with most photos full page like highway billboards, consistent narrow-column helvetica for the interviews, short arch introductions and captions.*

And there's a certain admirable severity in the magazine limiting its coverage so exclusively to New York City.

—SB
[Suggested by Lloyd Kahn]

Interview
Bob Colacello, Ed.
$12/yr., 12 issues
from:
Interview
860 Broadway
New York, NY 10003

JEAN PAUL DOLLÉ watches American TV for the first time.

JEAN-PAUL DOLLÉ: I am working on a novel about the second half of this century. A novel of trivia and love.
DOROTHEE LALANNE: What exactly do you mean by trivia?
Events which one believes give rise to no further consequences.
And what is the relationship between trivia and love?
A relationship of exclusion. They are mutually exclusive.

•

Your grandparents did not endure the indignities of a steerage journey to Ellis Island so that you could stand outside a discotheque and beg a wallpaper designer to take you in with him.

If you enjoy being a girl but, in fact, are not, stay out of the ladies room.

—Fran Lebowitz

Robert Livingston: I had a piece of my lung removed. But then the thing spread. It went to my ass. Then my legs. Then the neck. It's a fucking nuisance. I mean, for somebody who's never been ill.
Truman Capote: But you look terrific.
Robert Livingston: But think how much better I looked before all this happened. I think of all the people I've known who stopped smoking. Why couldn't I have had a wonderful friend who had lung cancer and who stopped me from smoking? Oh, you learn an awful lot. Awful fast. Think about things you never would have. Just imagine: In three weeks I'll have no hair. It all falls out in thirty-five days.

Contents Style Consequence

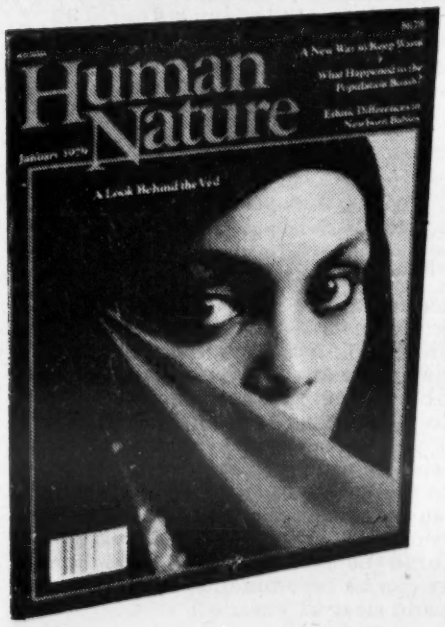
Human Nature

Well, its best feature is a regular piece at the back of the book called "Reconsiderations," in which worthy contemporaries newly appraise classic old books — Lewis Thomas applauds The Complete Essays of Montaigne, *John Gagnon appreciates* The Kinsey Reports, *someone else realizes that Watson's* The Double Helix *is, by God, literature, and so forth. A wonderful idea.*

For the rest, it's spotty. Over here, a condescending article on the opposable thumb. Over there, an intriguing investigation and defense of violent hooliganism at British soccer matches. The illustration style is atrocious. It's wallpaper — big meaningless stock photos, often with no captions at all. For left brain/right brain investigator Robert Ornstein (the publisher) to have so little to say in his magazine to the gestalts of our right brains is inexcusable.

One would hope that a magazine this new would have more original to offer an already over-slicked market. The idea of the project was to surpass Scientific American. *That hasn't happened.*

—SB



Human Nature
Elizabeth Hall, Ed.
$15/yr., 12 issues
from:
Human Nature
Box 10700
Des Moines, IA 50349

For a season at Oxford United a 16-year-old named Geoff was famous for his "wicked acts." One day a rival fan threw a lump of dog feces at him. In retaliation Geoff climbed up onto a terrace overlooking the offender and his friends, who were drinking tea, and urinated on them — onto their "heads and into their tea and all over," according to one of Geoff's comrades, "and it's raining a bit as well so they don't notice. Me and some others, we run down and were watching this and we're killing ourselves. But Geoff, he don't shout out or anything — he just waits for a bit till they finish their tea and then he shouts out 'Enjoy your tea then,' and as they look up he pisses a bit more and they go barmy."

Contents Style Consequence

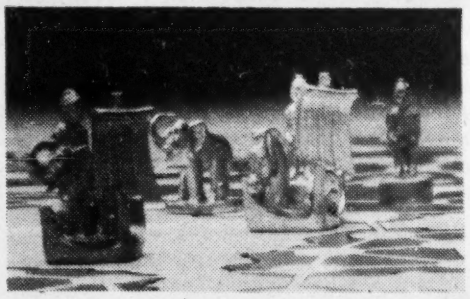
Games

By games they mean brain games — puzzles and pencil games and board games that require cogitation. Some of the magazine is about games — a report on the Fourth National Wargaming Convention and a play-by-play analysis of a championship Scrabble game. But mostly it is games — good games that you can play alone or with others. A crossword puzzle with two sets of clues — very hard and very easy, non-math logic puzzles by Scientific American*'s Martin Gardner, miscellaneous shapes from maps for you to identify, historic misprinted stamps reprinted for you to find the flaw, a 554 dot connect the dot puzzle, endless mindboggling word games and on and on. Also reader participation contests that make the ones in the back of* New York *magazine seem tame, and detailed reviews of new board games. The super slick, super graphic presentation seems appropriate in this case — hooks you right into playing as you leaf through.*

The games are consistently original and fun and funny. It seems as though game nuts and smart kids and teachers should consider subscribing. People embarking on long trips or mild illnesses should buy or be given at least one issue with warning that addiction may result. Games *in the house might make games a time-passing alternative to TV. You don't have to have a history of game fever to like it — I'm having trouble finishing this review because everyone in the office keeps stealing the magazine.*

—Anne Herbert

Games
Michael Donner, Ed.
$5.95/yr., 6 issues
from:
Games
Box 10145
Des Moines, IA 50340



Conquest available from the inventor, Donald Benge, 1122 West Burbank Blvd., Burbank, CA 91506, $10; with metal pieces $25; California residents add state sales tax.

Conquest was created to fill the gap between chess and the hexagonal grid war games (although no knowledge of either is required). Each of the two contestants maneuvers a medieval army of twenty land pieces and a navy of six sea pieces, shaped so that soldiers can be mounted on elephants or chariots, and these in turn can be carried by ships or galleons.

The board depicts four islands and surrounding seas, both land and water being marked with circles on which the pieces are placed. Roads, sea lanes, and bridges allow for travel around the board.

The rules can be learned in minutes and a game can usually be played inside of an hour and a half. Yet Conquest possesses a flavor of battle that compares favorably with that in the more complex and time-consuming hex war games, and still retains much of the clarity of chess. —S.S.

Contents Style Consequence

Omni

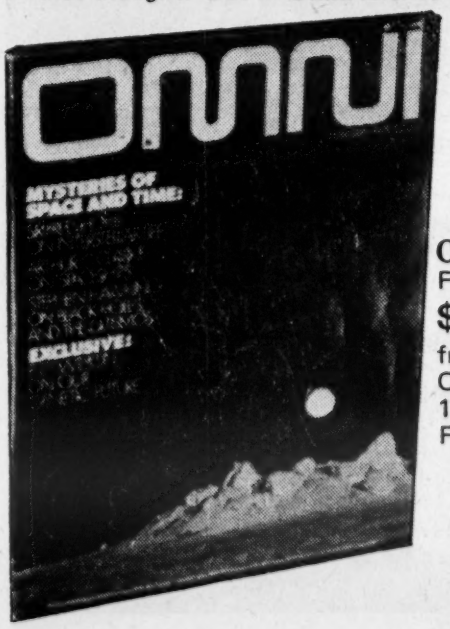
You know those bright red lacquer-like candy apples, that when you lay tooth to one the candy falls off in sticky shards and you're left with the mealy disappointment within? That's Omni. *From the Canadian National lettering of its logo to the dumbness of its full page color cartoons,* Omni *is almost pure derivative ersatz.*

Presumably the creators of the magazine had in mind that science is important these days and needs to be popularized. So far, so good. Scientific American, Science News, *and* Popular Science *have all in their different ways made good on that thought. But in* Omni *science is cute. And anything the editors say is sort-of science therefore is — including fantasy, speculation, Fortean stuff, and pop phenomena such as movies. Science is about making exactly those distinctions or it's nothing.*

Some of the gaudy illustrations are bad, some are not bad (Helmut Wimmer's black hole, Paul Peck's micro-medical landscapes). Editing is somewhat shoddy (homo sapiens instead of Homo, ignorant writing too often). The issue I'm looking at (Feb. '79) has a fascinating piece on astrophysicist Stephen Hawking devising white holes from inside his severe neurological handicap. Such looks at the lives of contemporary scientists is a service Omni *might well perform since almost no one else except the* New Yorker *is doing that.*

But I doubt that the magazine will last. In the metaphor of this issue of CQ, *it was flawed way back at conception. The result is too feeble to live very long. Cosmetic surgery can't help.*

—SB



Omni
Frank Kendig, Ed.
$24/yr., 12 issues
from:
Omni Magazine
155 Allen Blvd.
Farmingdale, NY 11735

•

NASA has estimated that the probability of anyone's being injured [by Skylab falling] is one in 200. This seems reasonable since there are 27,878,400 square feet in a square mile, and most of the orbital track of Skylab is over water. On an individual basis, the chances of harm are approximately the same as those for being struck by a meteorite — hardly a "potential tragedy of colossal proportions."

The actual tragedy is that this item should have been printed. There is no better way to turn people off on the space program.

C.A. Ourada
Littletown, CO

*There are three ways to lie: lies, damned lies, and statistics. NASA's assurance that only one in 200 of us has a chance of getting injured could be interpreted to mean that a million Americans – or 20 million inhabitants of this planet – have a chance of being injured by Skylab's debris. Not terribly reassuring. –Ed. [*of Omni]

Nautical Quarterly

I haven't seen its like since Eros. *Elegant design, comes in a box, no advertising. Sumptuous color photos of gorgeous creatures in loving detail, intelligent analysis of their working.*

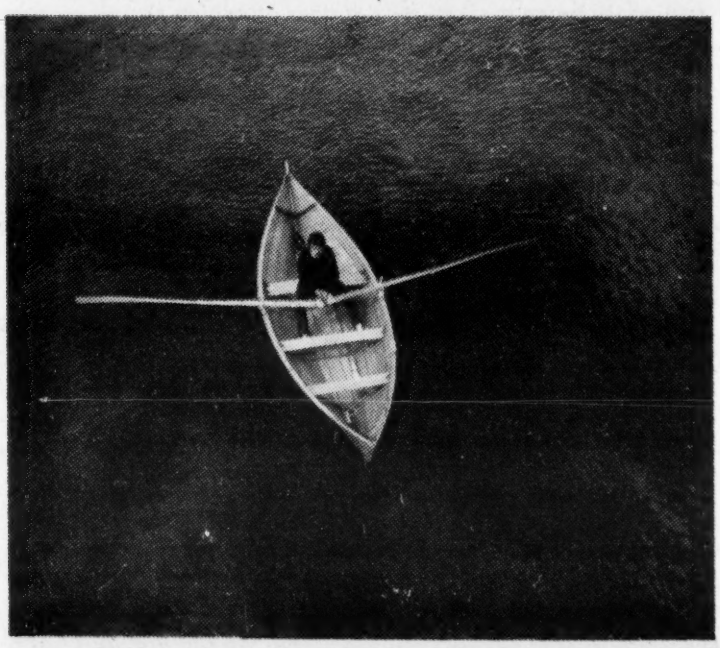
The sexy creatures are, of course, boats – sensational boats, sensational boating. The magazine doesn't do much in the way of how-to but concentrates on sheer appreciation of good work. Being free of advertising it can even look at the working of the boat biz, how for example the Grand Banks line of power yachts went bust, how Westsail sailing yachts made good. The editorial view is biased neither toward nor away from traditional boats and materials, so old and new styles are placed in interesting mutual context.

The publishers make a reasonable assumption that people who own boats are used to throwing away money and will not cavil at $35 for four issues. In fact that's a pretty good deal. If you're thinking of getting a fancy boat, why don't you just get this magazine instead, and save a lot of expense and aggravation?

–SB

Nautical Quarterly
Joseph Gribbins, Ed.
$35/yr., 4 issues

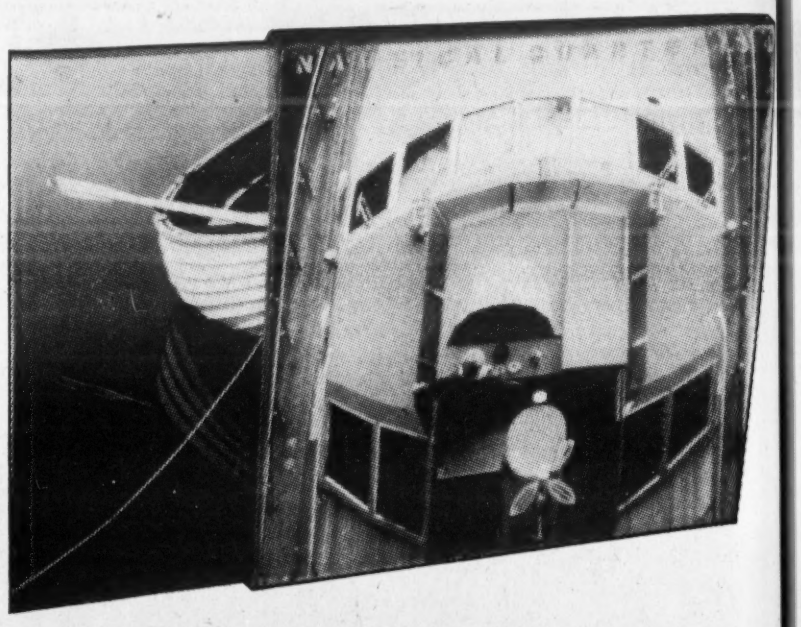
from:
Nautical Quarterly
141 Lexington Ave.
New York, NY 10016



There's something about a Scandinavian small boat. They row as well as they look, and they're seaworthy to boot. Here's a Norwegian boat, the Bjørkedals faering, originally from the west coast of Norway. It's noteworthy for its ability to survive nasty sea conditions and to carry extraordinary loads. As can be expected, it has a workboat heritage.

This faering is more than just another pulling boat with a Scandinavian "look." The builder, Paul Schweiss, learned his building techniques in Norway, and the construction of this boat is authentic. Planking is Sitka spruce; the stems are oak; the frames are natural crooks – oak, apple, locust, cherry, fir, whatever is available at building time. The faering is finished inside and out with Deks Olje, which makes her stand out in any waterfront crowd.

The Bjørkedals faering measures 20 feet overall, has a 5-foot, 4-inch beam, and the hull alone weighs 300 pounds. As a rowing boat, she comes ready to go, including oars; her sailing rig is optional and includes a sprit, gaff, lugsail, and squaresail. She is built by Paul Schweiss at Clinker Boatworks, 8906½ 35th West, Tacoma, Washington 98491. The rowing model is $2800; the sailing model is $3600.

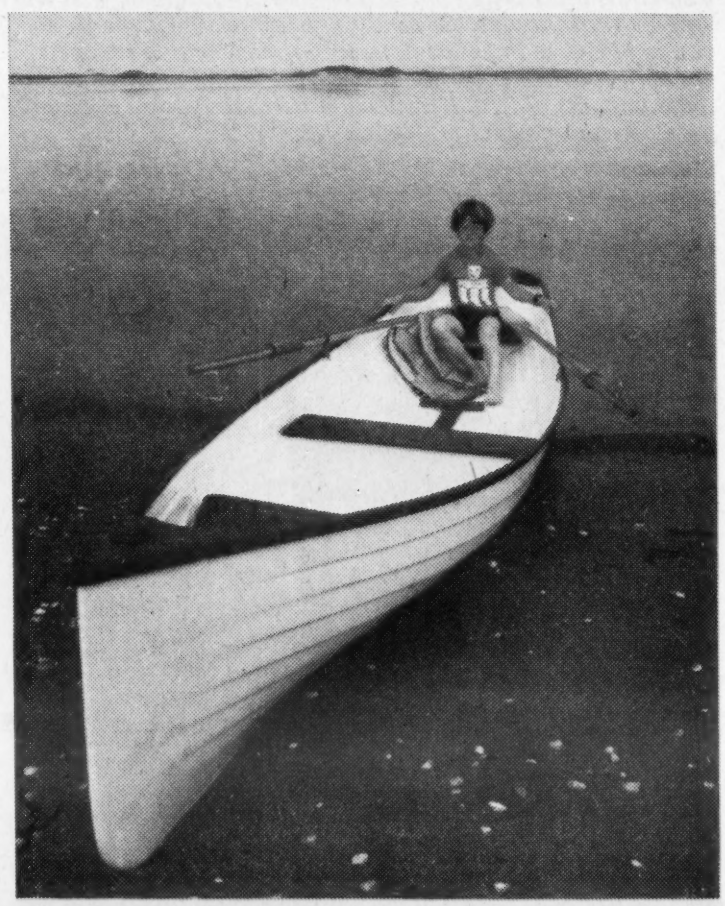


Truly notable fiberglass pulling boats are few and far between, but the Glass Slipper turns their heads every time. Said by her builder to be patterned after a boat 130 years old from Lake George, NY, this slippery craft has a Whitehall look about her.

Glass Slipper's hull is hand-laid fiberglass; there is foam flotation installed under the seats; the wood trim is oiled teak; and all of her fastenings are either brass or bronze. She comes from the factory with white interior and exterior gelcoats, but red, blue, or green are available as options.

Long and lean, the Glass Slipper measures out at 14 feet LOA; 3 feet, 6 inches maximum beam; 18 inches freeboard light and 9 inches loaded. She weighs in at 120 pounds. She's rated for a 3-horsepower outboard, but we would be disappointed to see her carry one. For one thing, a motor and its operator well aft would destroy her balance; for another, she's pure pulling boat. If you want outboard power, get a bass boat.

Salt Marine, Box 21584, Fort Lauderdale, FL 33315, builds the Glass Slipper. She retails at $675 FOB factory and can be shipped anywhere. Oars, with leathers and copper tips, are extra at $145. Expect to see your boat about four weeks after you order her.



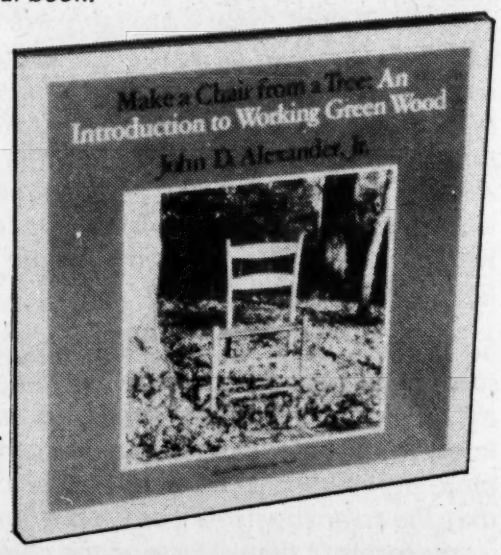
Make a Chair from a Tree

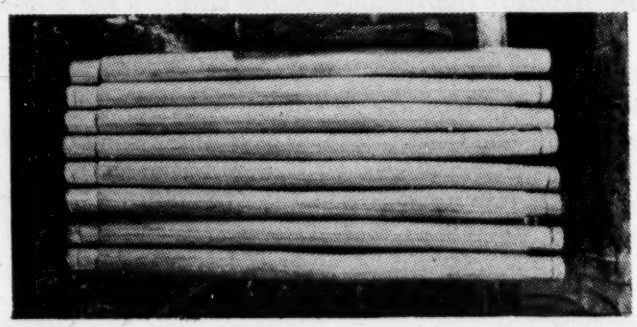
Loving, detailed instructions (and thoughts) on making a traditional slat back chair. Using hand tools, Alexander first shows how to make a low work bench and a shaving horse, then goes into the many elements involved in making a chair – design considerations (looks, strength, comfortable fit), properties of working wood (especially green hardwood), with detailed chapters on the rungs, posts, slats and woven seating.

John Alexander is a Baltimore lawyer who has been making chairs with a passion for 13 years. He has evolved a personal style, and it is his hope that the reader/craftsman will do likewise. A beautiful book.

–Drew Langsner

Make a Chair from a Tree
(An Introduction to Working Green Wood)
John D. Alexander, Jr.
1978; 125 pp.
$7.95 postpaid
from:
The Taunton Press
52 Church Hill Rd.
Box 355
Newtown, CT 06470





The shape of shaved rungs follows the long fibers, which aren't always straight. Shaving keeps the long fibers intact– these rungs are strong and flexible.

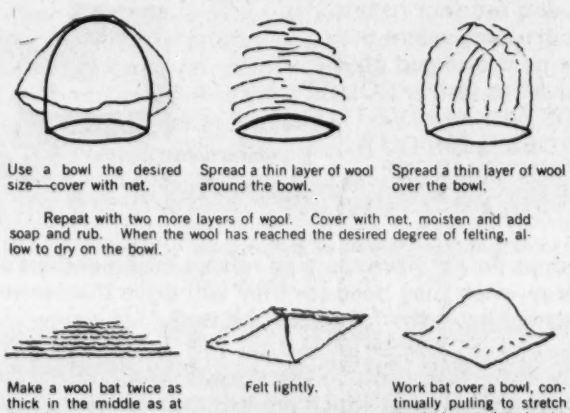
Felt Making for the Fiber Artist

Tiny book, tiny price. Enough info to start you stomping a rug or molding a hat or whatever.

–Diana Sloat

Felt Making for the Fiber Artist
Louise Green
1978; 24 pp.
$1.75 postpaid
from:
Greentree Ranch Wools
163 North Carter Lake Rd.
Loveland, CO 80537

Make A Hat



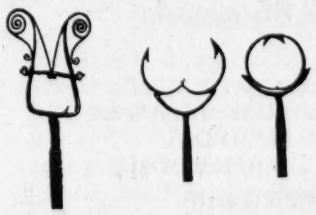
A Glossary of the Construction, Decoration and Use of Arms and Armor

What I want to do is share a treasure with you. Just as the title implies, this is the most comprehensive study of arms and armour I've ever seen, each page filled with the wonder and amazement of a benign Pandora's box. There are over 10,000 kinds of arms and armour described, with cross references and synonyms in numerous languages. Although my smile sags a bit at the poor quality of the photo engravings, this book still comes out as "the best." Any book on arms and armour can't help but make me question why man must do battle at all, but dealing with that issue is not the intent of this book. The "how" is. And that "how" is undeniably lusty, at times marvelously mad, and here impeccably written about. Read about Balestras, metal alloys for Japanese armour, and Australian Kurdaitcha Shoes.

–Charlene Modena

A Glossary of the Construction, Decoration and Use of Arms and Armor
(In all countries and in all times together with some closely related subjects)
George Cameron Stone
1961; 694 pp.
$12 postpaid
from:
Publisher's Central Bureau
1 Champion Ave.
Avenel, NJ 07131

Armor from the Kingsmill Islands. The main part of the suit is woven of heavy cord twisted from the fibre of the cocoanut. The helmet is the skin of a spiny fish. The backs of the gauntlets are armed with rows of shark's teeth.



Catch Poles. 1. Time of Henry VIII, now in the Tower of London. The middle V is made of two springs strengthened by the two flat sliding bars with trefoil ends. The staff is about 7 feet long, covered with crimson velvet studded with brass nails. 2. From Malaya. The figure to the left shows the position when pushed against the neck of the man it is desired to secure.

Catch-Pole, Man-Catcher. A pole with a fork on the end that had spring blades on the inside that prevented a man from withdrawing his neck once it was encircled by the fork. It was used in the early part of the 16th century – in war to pull men from their horses – and in peace to catch felons and escaping prisoners. The name was transferred to the officers who used it and survived long after the weapon had been abandoned.

A modification of this weapon is still used by the police in Malaya to catch natives who have gone amok.

Soft Technology

The Timeless Way of Building
A Pattern Language
The Oregon Experiment

These three books comprise a trilogy whose intent is to illuminate a planning method whereby the people of a community plan, build and modify it as their needs require. This doesn't sound very unusual in words, but I assure you that if you study these and other books on the subject, you will soon see that most recent building has not been under very good control.

The first book gives the general philosophy. I read at it and didn't learn very much, but perhaps that is because I've done quite a bit of reading on the subject. **A Pattern Language** *is another matter. It is, as the jacket says, a working document – and more like it! It's something you can use. It offers a language for design that can be utilized by anybody, not just architects. Indeed, one of the book's main points is that the places people like best usually have not been designed by professionals. The "patterns" are recurring problems that bother people over and over in most of the places they happen to be. They are presented and discussed and finally "solved," and (important) they are linked to other patterns. The book uses a set format for each pattern so it's easy to keep track of things. The example shown (below right) is typical. I have found this book to be highly vaulable and useful, not merely an academic exercise.*

The Oregon Experiment *is the latest in the series. It documents what is actually being done, now, in the design of the University of Oregon. It shows the ideas of the other books in action. Exciting! I like the last paragraph in this book, for it says well what I perceive as a necessary attitude for the intentional building of a community:*

> Our point is now transparent. The precise order that emerges as a result of the gradual coordination of hundreds of acts of piecemeal design cannot be known in advance; it can only arise slowly out of a community that is sharing patterns, responding to diagnosis and taking responsibility for its own plans and designs.
>
> A precise plan for the University of Oregon cannot be fixed in advance. If it is to be an open, organic plan, it must grow from the hands of the community itself.

Note: All excerpts below are from **A Pattern Language.**

–J. Baldwin
[Suggested by Baird Gentili]

The Timeless Way of Building
Christopher Alexander
(To be published Fall, 1979)
$25.00 postpaid

A Pattern Language
(Towns, Buildings, Construction)
Christopher Alexander, Sara Ishikawa & Murray Silverstein
1977; 1169 pp.
$27.50 postpaid

The Oregon Experiment
Christopher Alexander, Murray Silverstein, Shlomo Angel, Sara Ishikawa, Denny Abrams
1975; 190 pp.
$12.95 postpaid

all from:
Oxford University Press
16-00 Pollitt Dr.
Fair Lawn, NJ 07410
or Whole Earth

Do what you can to encourage the development of individually owned shops. Approve applications for business licenses only if the business is owned by those people who actually work and manage the store. Approve new commercial building permits only if the proposed structure includes many very very small rental spaces.

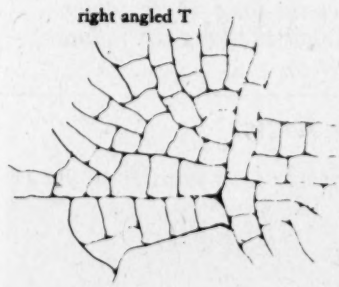
Shop run as a way of life

PLACES TO LIVE

*"You alternative technology types have no credibility," snapped a government official last summer when I was harassing him at a conference. He was right of course. My answer has been to commence the groundwork for an all-solar community based on the work of the New Alchemists (***CQ***, Winter '78). There are many people interested in such a scheme which would irrefutably prove that ordinary folks can live a USA-type good life yet not be wastrels. I have no illusions about being able to "design a town"; that's probably effrontery. But certainly it should be possible to establish some basic ideas, a sort of DNA, that will enable such a place to evolve in a desired way. It should be possible to draw up ground rules that would tend to encourage the building of a community that would be satisfying to a wide variety of people, while at the same time enable people to "live lightly on the land."*

So I've been reading. The following books are some that have recently interested me. I know that there are others that would be useful. If you know of any, I'd appreciate a postcard. Incidentally, the reading of these books has convinced me that the solar township has been a-hatching in many forms in many parts of the country for some years now. I see the concept as a chance to synthesize much of what we've been learning independently; an opportunity to work together in a new way as a strong balancing force in a society that is badly out of whack. These books represent the investigation of an assortment of ideas, all essential to the construction of a post-industrial society.

–J. Baldwin



Lay out the road system so that any two roads which meet at grade, meet in three-way T junctions as near 90 degrees as possible. Avoid four-way intersections and crossing movements.

•

Connect your building up, wherever possible, to the existing buildings round about. Do not keep set backs between buildings; instead, try to form new buildings as continuations of the older buildings.

Connect buildings with arcades, and outdoor rooms, and courtyards where they cannot be connected physically, wall to wall – COURTYARDS WHICH LIVE (115), ARCADES (119), OUTDOOR ROOMS (163). . . .

•

If children do not have space to release a tremendous amount of energy when they need to, they will drive themselves and everybody else in the family up the wall.

•

Balconies and porches which are less than six feet deep are hardly ever used.

Eccentric Spaces

Fantasy spaces from literature and fantasy spaces actually constructed are examined for their psychological and metaphysical content in this bold and definitely offbeat exploration. Harbison's analysis of the sources of imagery and forms in architecture and city planning, gardens and fictitious locales are often startling. I don't much care if he's right or merely being effete — the book is just plain fun to read. It certainly causes you to look at the world from a different vantage point, which is probably all one can ask. It is assumed that you have travelled and read widely.

—JB

Eccentric Spaces
Robert Harbison
1977; 177 pp.
$8.95 postpaid

from:
Alfred A. Knopf, Inc.
455 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Foreigners are struck by the large part piety has in the English temperament and surprised at its objects which often seem trivial customs: tea, school sports, clubs. The ruling idea is that of a safe haven in a stormy world, and adventure is seen in schoolboy terms as truancy. Thus Holmes and Watson meet danger by staying up all night in a dark cellar and reminisce over whisky in the morning. Staying up after others retired is the recurrent way they flush out evil; if they can get through the night, it will be all right once daylight comes and everyone is up and about.

•

Every pub feels slightly different from the others but a good one feels familiar at once, can be large but is made to feel small by breaking up the space illogically. Most important are furnishings like heavy curtains which muffle the doors, symbolic safeguards against an unspecified threat, quantities of padding on walls and seats, protection from abrupt encounter which would feel sybaritic if all the materials were not so inelegant and dingy. Loud colors are prohibited, fresh paint must not look it, because cheerlessness is conveyed not by dirt or squalor but by emptiness or excessive alertness. They are places where a reassuring amount, where an impossible amount has already happened, but the drabness suggests that this lengthy past has been a past without incident.

•

The Sears catalogue equips and defends us, arms us for life which becomes pure technique, so every object emerges sounding like a weapon or a fort, something useful in a struggle. That catalogue, more obviously imaginary than most, has invented a life it imputes to all its readers, and puts them into the story it tells. The lives evoked by catalogues — musty, secretive, and cluttered — depend on intense vision confined to a small corner like a child's.

People In Places

While addressing many of the same points as **Body, Memory, and Architecture**, *this book opens another avenue for exploration; that of actually learning to experience spaces and buildings. No expertise in architectural history is needed. There's nothing very erudite or effete here. Plain folks and plain manmade environment. But with a practiced eye one can begin to understand why certain houses, for instance, feel good to be in, or why a city such as San Francisco seems to be a nicer place to be than Newark. The ideas are offered in a way that makes them accessible to children, and that is this book's best feature. Actual exercises in increasing architectural awareness invite you to begin to take control of your surroundings. You don't need to hire an architect. When the time comes when you can build things yourself, you'll be far more likely to do something that will please you and others. I'm glad to see a book that gives an architectural license to amateurs.* *—JB*

People in Places
(Experiencing, Using, and Changing the Built Environment)
Jay Farbstein and Min Kantrowitz
1978; 182 pp.
$4.95 postpaid

from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ 07632
or Whole Earth

Safety and security depend on relatively constant surveillance of public areas. Danger is accentuated in areas which cannot be seen, as in some high-rise housing situations where corridors provide corners in which an intruder could easily hide. Unlit parking areas which are invisible from any house, public spaces which are shared by so many families that strangers cannot be distinguished, and buildings which have many possible entry points all contribute to feelings of vulnerability. Design which encourages people to use and monitor their own places can reduce crime and fear.

Body, Memory, and Architecture

Ever notice that photographs of modern buildings rarely show any people? That's not really surprising when you inspect the motivation behind the design: corporate aggrandizement, or cheapest per square foot, or both. No people. This book takes a look at how people react to buildings, how they perceive the world around them, and what can be deliberately done to enhance the people/building interaction. The explanations smack a bit of being after the fact, but there's still lots to think about. The discussions of body imagery are especially good. *—JB*

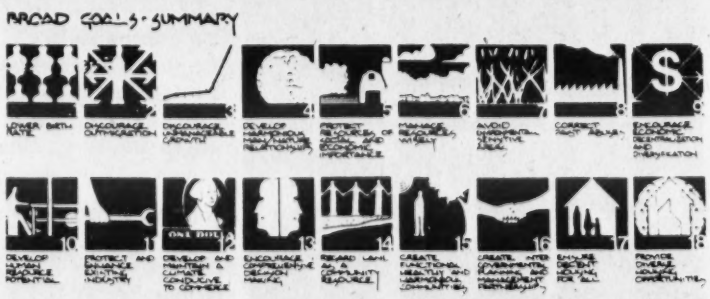
Body, Memory, and Architecture
Kent C. Bloomer and Charles W. Moore
1977; 147 pp.
$6.95 postpaid

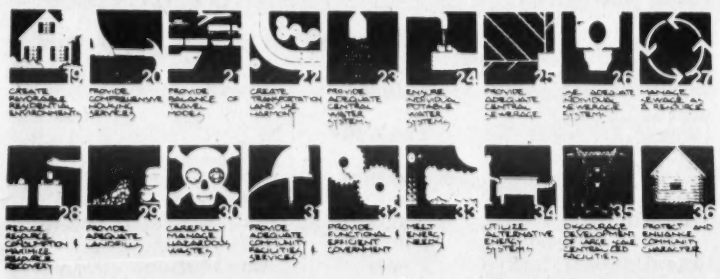
from:
The Yale University Press
92A Yale Station
New Haven, CT 06520
or Whole Earth

St. Lawrence County Comprehensive Land Use Plan

This is one of the most enlightened land use plans I've seen. Going far beyond the usual glorified city planning graduate student project sort of thinking, this plan is conceived as a means of informing the populace sufficiently so that hopefully they will be able to see where their long-range interests lie. Many aspects of county economics that are difficult to find out about are presented in simple language — no official obfuscation here. The authors are truly interested in having people understand what is going on and what the economic forces are. They thus show the "big picture" that is so often unavailable to everyday folks. I'm sure that just about any interest group you name could pick some nits in this report, but to me it is a welcome model of what can be done. It'll be interesting to follow the implementation of it. I intend to stay in touch with these people and will report their progress.

—JB





St. Lawrence County Comprehensive Land Use Plan
Richard W. Grover
1978; 279 pp.
$5.00 postpaid

from:
St. Lawrence County Planning Board
126 Clarkson Hall
Potsdam, NY 13676

Form Follows Fiasco

Peter Blake, architectural critic extraordinaire, explains why so many buildings and cities are so awful. He does this in a witty, wide-visioned way (rare in "experts"), obviously hoping that if we understand the forces that made such a mess, we won't do it again. His style of criticism is often just plain vicious, which makes it easy to read. Much of what he reveals is appalling and makes you feel that your worst fears were nowhere near as bad as what has actually been done. This is one of the clearest portraits of the enemy I've seen.

—JB

Form Follows Fiasco
(Why Modern Architecture Hasn't Worked)
Peter Blake
1977; 169 pp.
$6.95 postpaid

from:
Little, Brown & Co.
200 West Street
Waltham, MA 02154
or Whole Earth

All over the world, buildings that have been recycled from an earlier function to a new one seem to serve their users better today than they ever did before — and better than contemporary, brand-new efforts designed and constructed to a form that supposedly follows and expresses its function.

The best museums in Italy and in Spain, for example, tend to be recycled convents or palazzi of the Renaissance or of the Middle Ages, whereas modern museums, designed specifically to display and celebrate the art of our century, look like cut-rate department stores with bargain basements up to the roof-line. In Great Britain, the best concert hall may be a recycled brewery — now known as the Maltings at Snape in Suffolk; in Baltimore, the best art school may be a recycled railroad station — the Mount Royal Station, now become the Maryland Institute, College of Art; in New York, the best library may be a recycled courthouse — and the best theater may be a recycled library! In San Francisco, the nicest shopping center, Ghirardelli Square, is a recycled chocolate factory; in St. Louis, the beautiful headquarters of an educational laboratory was carved out of an abandoned Civil War hospital; and in London, one of the nicest office buildings may well be a recycled warehouse.

•

One of the reasons modern architects continue to be misled by the manufacturers of many of the new miracle products is that the professional magazines do not dare to report the failures. When they do, their advertisers — the manufacturers of many of those shoddy materials and products — will gang up on the offending publication and wipe it off the map by, in effect, blackballing it. Or by blackballing the editor who dared to tell the truth. When I was in charge of a fairly prominent and professional U.S. publication on architecture and related matters, I had the nerve to mention — not in my own magazine, but in **The Atlantic Monthly** — that glass was not necessarily the building material it had always been cracked up to be. Whereupon one of the two or three principal glass manufacturers in the United States withdrew his advertising from my professional publication and apparently induced other potential advertisers to do the same: a very effective form of censorship, since my own publication was thereby put out of business, despite a growing and hugely enthusiastic readership. **The Atlantic** was, presumably, put merely on notice. The lesson was not lost upon other architectural magazines, which have since steered clear of subjects that might offend the tender sensibilities of their advertisers — if, indeed, they ever did want to offend those sensibilities.

The new Zagreb, a Ville Radieuse *almost par excellence, is a dead city, a place of loneliness and alienation; whereas the old Zagreb, designed by no one, and made seemingly unworkable by the invasion of the automobile — this is where the action is. And here, in these old and not very convenient houses, live most of the architects responsible for the design of the new city!*

Business and Preservation

A good many books on "recycling" buildings have crossed my desk recently. Almost all of them are slick photo albums showing how someone made an interesting home out of an old foundry (and $72,000 they don't mention) and five years of carefully collecting beautiful old artifacts to give the place character. That sort of thing makes good reading while waiting for the dentist, but isn't very useful or even inspiring because it's all mystery. Here at last is a book that takes at least some of the mystery out of the economics and nostalgia involved. The examples are of businesses, and the motivation towards restoration and preservation is economic. The many examples are illustrated with good photographs and the history of each effort is briefly outlined, including the finances and the benefits resulting from the project. The net effect is a book that can be used as a persuasive argument for preservation in your community. Ironically, it's only important flaw is that it probably isn't slick enough for a boardroom coffee table!

—JB

Business and Preservation
Raynor M. Warner, Sibyl McCormac Groff, and Ranne P. Warner
1978; 295 pp.
$14.00 postpaid

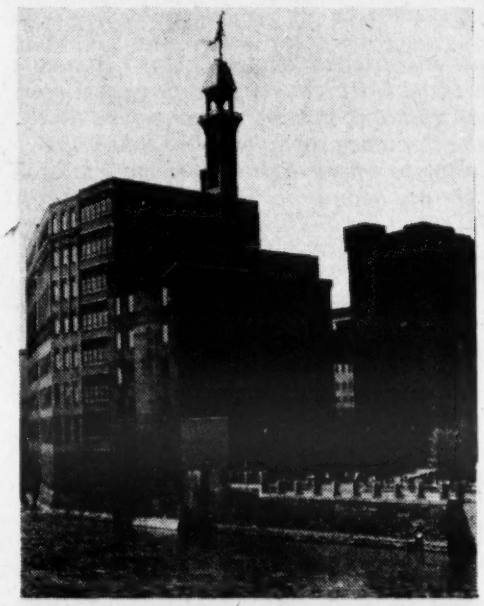
from:
INFORM
25 Broad Street
New York, NY 10004

	RETROFITTING		NEW
land value	$ 300,000		$ 300,000
value of existing shell	1,250,000		—
cost to demolish	—		100,000
total sq. ft. need	125,000		125,000
renovation costs, including:	1,800,000	new construction costs,	6,250,000
mechanical systems	700,000	including:	700,000
floor finish	150,000		150,000
window replacement	100,000	time for new	—
time for renovation	1 year	construction	1½ years

Benefits Richard Handler, of Handler/Grosso, enthusiastically assessed the results of the rehabilitation:

At a cost of less than one-half of a new building, this office building provides functional area equal to any new building with the elements of charm and historic continuity for the company as well as historic significance for the community.

In addition to the cost savings, rehabilitation, unlike new construction, made it unnecessary for the company to reshuffle its operations and employees. The newly decorated, bright, and spacious interiors also enhance the working environment. Employees take pride in their offices and in Mercury, a Rochester landmark for years.



The new park is popular with both employees and city residents; it has even led to the establishment of a bocce league among the employees. In addition, some local citizens have telephoned the company to express their appreciation. The company has received a good deal of favorable publicity in local newspapers and magazines.

The recycled Lawyers Cooperative buildings in Rochester, NY.

Preservation News

Old buildings are better, cheaper, and more loved than new buildings. The irresponsible behavior encouraged by constant destruction of familiar town and cityscapes is unmeasurable but universally acknowledged. This tabloid from the National Trust for Historic Preservation in the U.S. informs and strengthens the hand of the preservers.

—SB

Preservation News
$15.00 /yr ($5 for students; includes one year membership)

from:
National Trust for Historic Preservation
740-748 Jackson Place, NW
Washington, D.C. 20006

An American Stonehenge, built in 1918 by a Quaker railroad tycoon, stands high on a cliff overlooking the Columbia River in Maryhill, Washington. The 1,000-ton concrete copy of what was believed to be the Druids' observatory was constructed as an antiwar monument by Samuel Hill. He started a Quaker agricultural colony there in 1907 and in 1914 began a Flemish castle, but his wife was opposed to the idea and they never moved in. After World War I, he returned and finished the castle as the Maryhill Museum of Art. Today, Maryhill is a ghost town with only the art museum and Stonehenge standing.

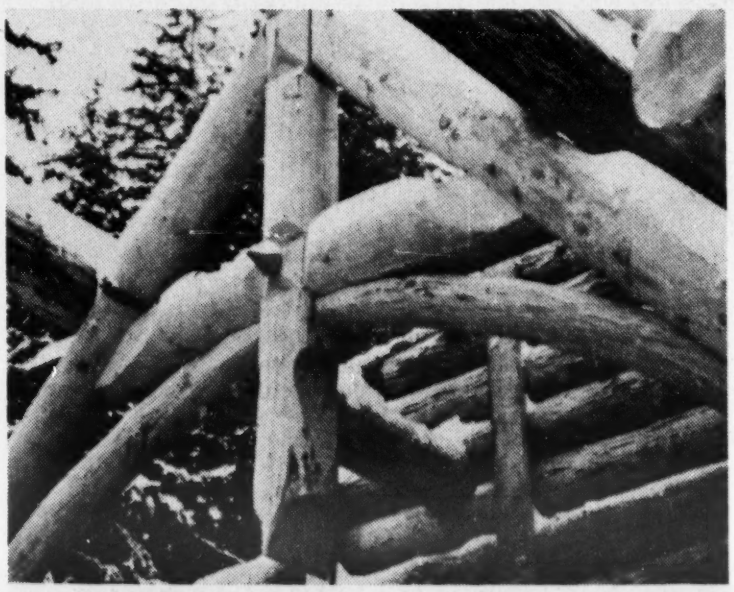
Notches Of All Kinds

You'd think it would be difficult to add to the incomparable **Building With Logs** *(CQ, Fall '76) but Mr. Mackie has done just that, and in a big way too. He shows the tiniest details of every sort of log-joining tactic imaginable, backing an expert text with sharp closeup photographs and equally sharp diagrams. This is no book written from the "experience" of making one cabin; it's a distillation of several centuries of proven northwoods technique gained from countless actual structures. You log stackers should go over this book and the other offerings by Canadian Log Builder before chopping; I doubt if anyone knows more about it than they do. These books are also an example of how-to at its best. I wish other publishers would take note. Mr. Mackie runs a log building school, too.*

—JB

Notches Of All Kinds
(A Book of Timber Joinery)
B. Allan Mackie
1977; 91 pp.
$15.00 postpaid

from:
Log House Publishing Co., Ltd.
P.O. Box 1205
Prince George
B.C., Canada V2L 4V3



The above photograph shows a mitered joint where the King Post and the Collar Tie cross. A mortise and tenon join would have served as well, but the visual effect would have been less striking.

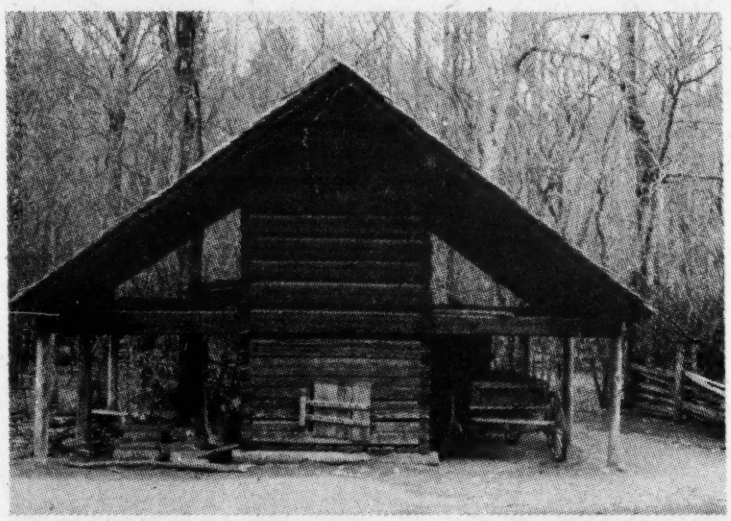
The Log Cabin

A historical look at North American log buildings, profusely illustrated with nifty photographs, many in color. Though you might think that a whole book of log cabin pictures might be dull going, I note that visitors who start casually leafing through it are soon unavailable for conversation.

—JB

The Log Cabin
Alex W. Bealer and John O. Ellis
1978; 192 pp.
$6.95 postpaid

from:
Barre Publishing
c/o Crown Publishers
One Park Avenue
New York, NY 10016
or Whole Earth

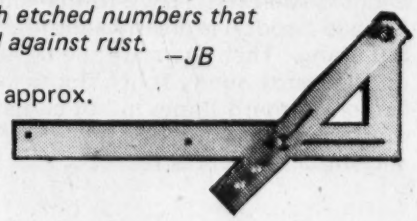


A fine cantilever barn on the Oliver place. The cantilevers are hewn on a taper to the outside ends, intended both to save weight and to lessen the strain on the supporting center. The taper lends a natural grace to the huge timbers and the structure as a whole. Cantilever barns are an expression of the German influence on log buildings of this period.

Squangle

There are a lot of giant protractors and angle sawing guides on the market, but the Squangle seems to be the most useful. I'm sure many of you carpenters already know it, but I'll bet many of you are unfamiliar with the clever device. It makes easy work of cutting roof rafter angles, especially the must-be-accurate "birdsmouth" cuts. When used with the companion **Rafterule** *there's no faster or more accurate way to make the complex cuts that defeat so many amateur builders. They're sturdily made with etched numbers that won't wear off, and plated against rust.* *—JB*

Squangle **$6.50** approx.
from:
larger hardware stores and lumber yards (they can order one if not in stock)



Pro Level

This dial level has a wide range of uses ranging from setting the true angle of a solar collector to accurately measuring the angle of an existing roof so the addition will match perfectly. It's useful to half a degree, and has a table of rise-and-run on the back. Some models have a magnet so you can stick the level to a pipe or other metal you are bending to a desired angle. You can get one incorporated into a standard carpenter's level, and in several sizes. I've found that the large size is easiest to read and use. You'll have to make a box for yours; they're easily munched in a toolbox. *—JB*

Pro Level
$7.00 approx.
from:
local hardware stores, or Sears, No. 9GT3995

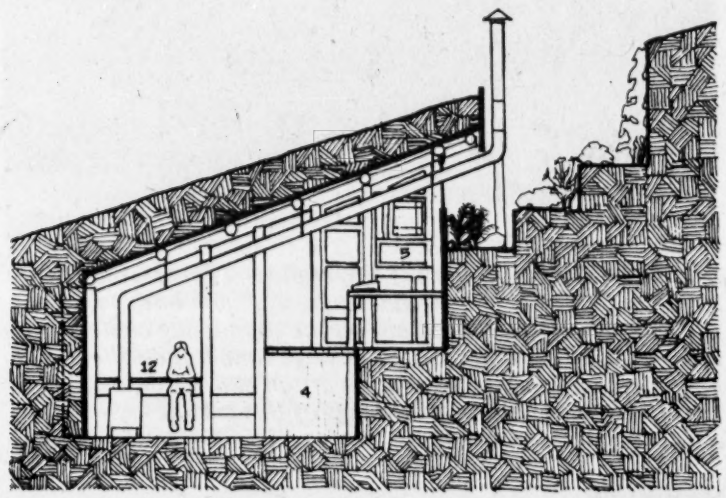
The $50 & Up Underground House Book

A boom in private underground shelter construction is clearly trying to happen, and still none of the major publishers have come up with a comprehensive how-to guide for the do-it-yourselfer. Besides Malcolm Wells' inspiring-but-general Underground Designs, *plus an occasional mag article, this new, warm, bright (and, yep, self-published) book is about the only thing currently available. Oehler flatly doesn't like concrete, and at the structural core of his sub-surface dwellings is what he calls the "PSP system" (post-shoring-polyethylene), which admittedly flunks most Code requirements. Nevertheless, it sounds like the very best low-cost outlaw home going. Even if you're holding out for a guide on* concrete *underground construction, Oehler's book provides many times its cost in perceptive tips on sub-surface design, philosophy, living, and underground building in general.*

—Lewis Watson

The $50 & Up Underground House Book
Mike Oehler
1978; 112 pp.
$6.00 postpaid

from:
Mole Publishing Co.
Rt. 1, Box 618
Bonners Ferry, ID 83805



Cross section of $500 house.

We will be dealing primarily with underground houses on hillsides. Hillsides are preferred building sites for a number of reasons. For one, the drainage is better. For another, you stand a better chance of getting a sweeping view. Still another is that hilly land is traditionally less expensive than flat land, and it is what most back-to-the-landers usually wind up with. Sewage disposal is greatly simplified when there is indoor plumbing. Then there are the terrain advantages of building on the warm, sunny south slopes in cold climates and on the cooler northern slopes in hot climates. Finally, and perhaps most importantly, flat land is usually prime agricultural land and should be left as such.

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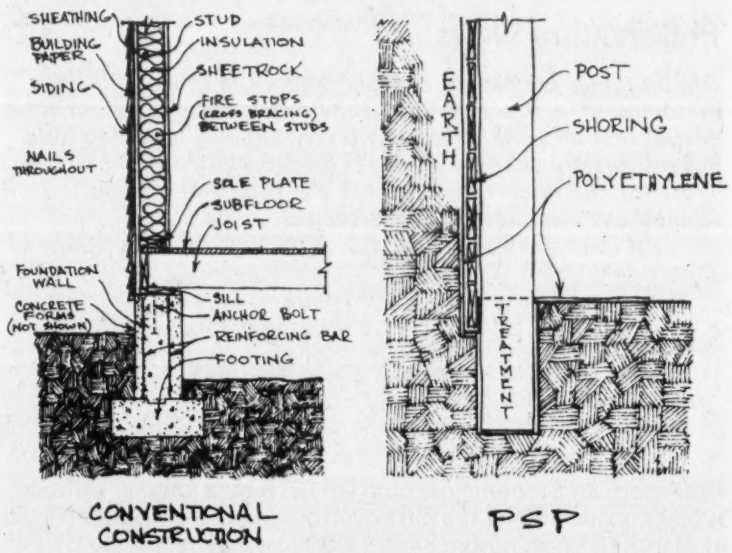

CONVENTIONAL CONSTRUCTION — PSP

While wood is the basic component of the PSP system, polyethylene is the secret of its success. Polyethylene is inexpensive, easy to work with, and readily available. It is an absolute moisture barrier and is what keeps the wooden walls from rotting. While it is true that this plastic deteriorates quickly when exposed to the ultraviolet rays of sunlight, it lasts indefinitely underground.

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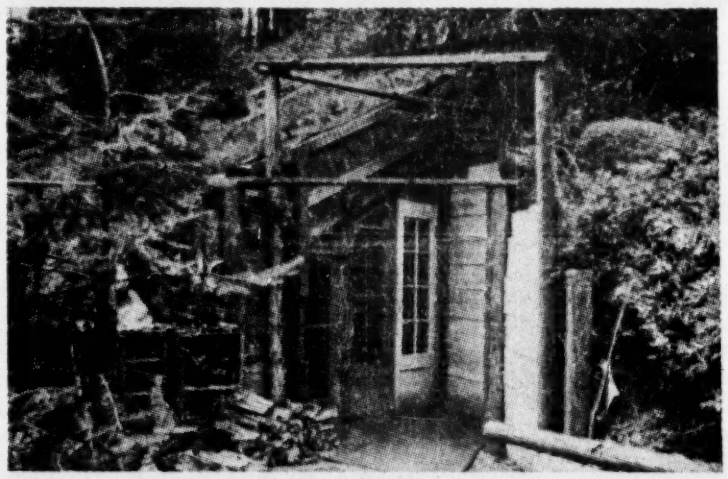


Insect-proof door

Item: I think it's from the *American Legion's Magazine.* "Insect-proof door has been designed by Alvin Stewart of Sanford, N.C. He takes a sheet of clear plastic slightly wider and longer than the door space, shreds it into 3/4-inch ribbons starting at the bottom and reaching almost to the top, hangs it over the door opening. It's easy to walk through and, he claims, its fluttering keeps out more bugs than a screen door."

Curiously yours,

J. Feiman, Canton, Ohio

This works surprisingly well. —J. Baldwin

Dome Builder's Handbook No. 2

Like its predecessor, this dome book is not a builder's manual, but rather a series of thought-provoking articles reflecting recent thinking and experience, some examples of plans, and a comprehensive listing of dome manufacturers. If you're tempted to build a dome, this is where you start. Lots of colored photographs show a growing sophistication in design and execution; the mindless fad has been replaced by a new appreciation of the dome's excellent thermal characteristics and opportunity for imaginative interiors.

—J. Baldwin

Dome Builder's Handbook No. 2
William Yarnall
1978; 126 pp.
$6.20 postpaid

from:
Running Press
38 South 19th Street
Philadelphia, PA 19103
or Whole Earth

Makita Tools

If you're fed up with domestic poor design and/or workmanship and can't afford Bosch or the highest grade US tools, take a look at these. Though not by any means cheap, they are very good values for the money. Makita also offers several tools that are not available anywhere else, such as their monstrous 16" portable circular saw. Service centers are coast to coast. —JB

Makita Tools
One distributor with good prices is:
John Harra Wood & Supply Co.
39 West 19 Street
New York, NY 10011

16" Circular Saw $253

Defiant & Vigilant parlor stoves

I've lived with an Ashley Thermostatic. I've lived with the spiffy airtight European enameled lovelies (Jøtul and Lange). Now my cottage has a Vigilant, the junior of the two parlor stoves from Vermont Castings, and I expect never to find a better.

First of all, it opens up so I can bask my mind in firelight and be right there with it while it starts to warm the room. It's better than TV to watch. Second, third, and fourth, it has the best burning design in the business (with two distributive air entries, one with a thermostat, an excellent long flamepath when operating closed, good airtight construction); the best looking design (to my conservative New England tastes — it even has the date of manufacture in the fireback decoration); and the best service (cheery and quick response, intelligent instructions, a feeling of a solid company behind it).

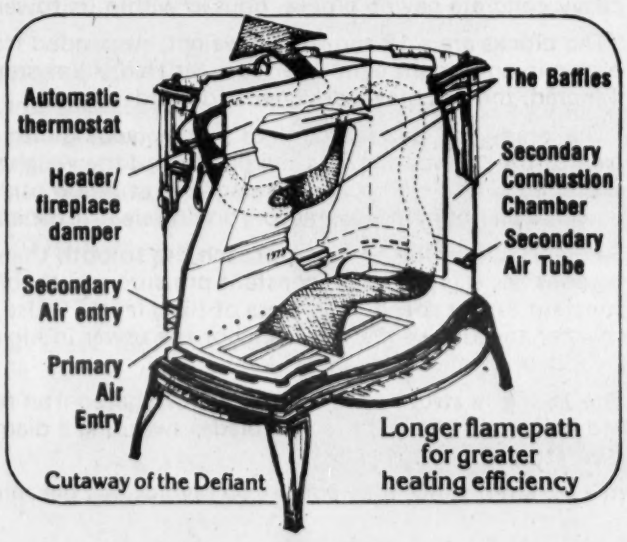
Quality. The kind that makes you think about lifetimes.

—SB
[Suggested by Jan Adkins]

The Defiant
Height 32", length 36",
depth 22", weight 340 pounds.

$545 plus shipping
both from:
Vermont Castings, Inc.
2091 Prince St.
Randolph, VT 05060

The Vigilant
Height 30", length 32",
depth 24", weight 245 pounds.
$445 plus shipping



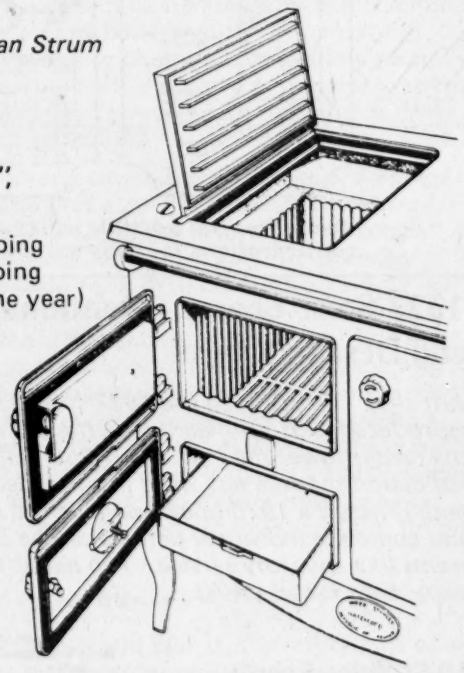
Stanley wood cookstove

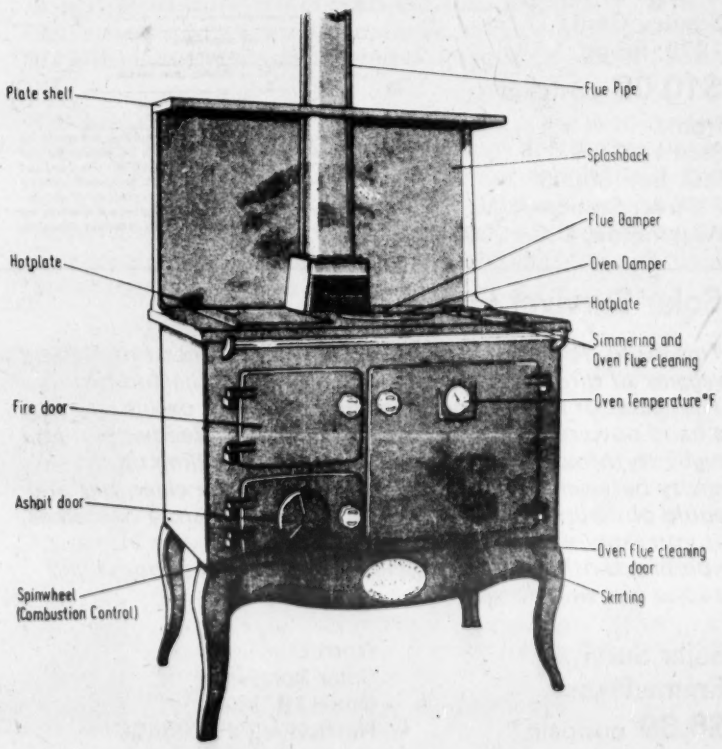
Testimony to the Stanley. It will hold a fire all night, because it's airtight and has a cavernous firebox — you can put whole rounds of Oregon alder in it. The oven will get up to 350° F. within half an hour of lighting the kindling. It heats evenly, will get up to 600° very rapidly, and you can broil things on the highest rack. (The temperature gauge is set high on the oven door, though, so if you want an accurate reading for the oven floor, where you'd bake cakes, pies, bread, etc., you need to stick one of those oven thermometers in there.) The stove is designed to burn wood, peat, or coal. We've only used wood — hardwoods like alder, holly, cascara, cherry and maple — and so long as the wood is dry and you keep the oven door closed (to prevent the oven walls cooling and trapping soot) the fire produces only the smallest quantity of fine ash and only needs cleaning every six weeks or so. The stove comes with a set of cleaning and adjusting tools. We paid $600 for it, but with the waterfront it would be considerably more. It's very efficient, burns large hunks of wood (important for a compulsive baker who can devote only minimal time to cutting, splitting and hauling wood), and can brew a pot of coffee on 2 sheets of the Wall St. Journal and a few sticks of kindling faster than a hotplate. One medium dog fits comfortably underneath it, and the warming bar across the front accommodates three shivering adults easily.

—Carol Van Strum

Stanley Wood-burning Range
Width 16", Height 13",
Depth 15-3/4"
$795.00 plus shipping
(This price will be going up to $975 within the year)
from:
Lehman Hardware & Appliances, Inc.
Box 41
Kidron, OH 44636

or inquire through your local stove dealer





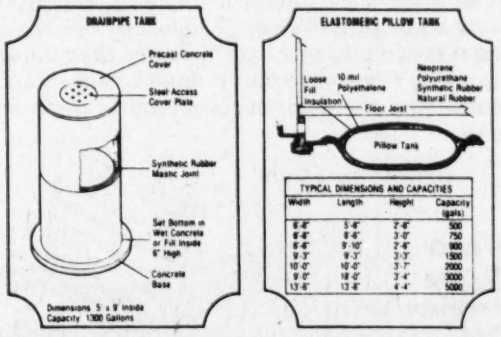
The Solar Decision Book

Dow Corning presents this exceptionally clear aid to making good design decisions and estimates when working with flat-plate technology. Flat plates are stressed because Dow Corning makes heat transfer fluids and Silicone Caulk, both much used in such equipment. The banker-convincing aspects of the information are among the best I've seen, and certainly could be applied effectively regardless of the sort of solar hardware under consideration. The short take given to passive is regrettable, but should not detract from the excellence and ease of use of the subject matter covered. It's one of the most useful rough estimate tools in print. Lots of formulas and charts with worked-out examples.

—JB [Suggested by Kennan C. Herrick]

The Solar Decision Book
Richard H. Montgomery
1978; 338 pp.
$10.00 postpaid

from:
Dow Corning Corp.
The Solar Decision Book
Dept. 2268
Midland, MI 48640



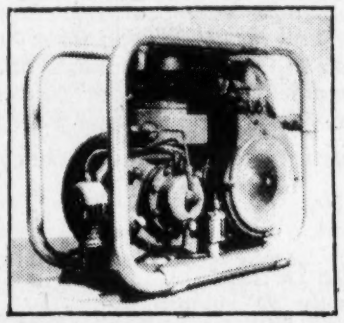
Two of several possible water storage tank configurations for solar systems.

Hot Air Engines

The "hot air" engine has been a matter of renewed interest lately, as the type can be raised to a useful efficiency while making less pollution. They are powered by an external heat source, solar being one possibility. Information about all the different types that have been tried and proposed has been difficult to find except in bits and pieces. Mr. Aun has done considerable legwork getting this booklet together, hence the price. If you desire an education in hot air machines, this is where to start. Lots of diagrams make it all easier to understand. —JB

Hot Air Engine Primer
Tonu O. Aun
1978; 51 pp.
$6.00 postpaid

from:
Tonu O. Aun
P.O. Box 626
Saint Quentin
New Brunswick
Canada EOK 1J0



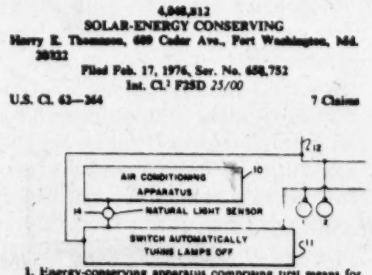
All external combustion engines have the advantage of low pollution over internal combustion motors. The major cause of engine pollution is the incomplete combustion of the fuel. The steady burning characteristic of external combustion engines is incomparably easier to regulate for total combustion than the intermittent explosion and subsequent evacuation of internal combustion cylinders. The destruction and loss into the atmosphere of piston lubricants is also much less of a problem in a closed cycle engine. The ultimate in pollution-free operation is when the external heat source for the air engine is sunshine.

1977 Solar Energy Inventions and Design Patents

Just that. Virtually all the 1977 solar patents are briefly reproduced (not very well) in sufficient detail so as to enable the reader to get the idea. Over 250 patents are shown; an indication that the last word in solar ideas has not yet been said. There's a 1976 book available too at the same price, and complete individual patents can be had for a dollar. This seems like a worthy service. Too bad it isn't available in every field for all years! —JB

1977 Solar Energy Inventions and Design Patents
Stanley Garil
1978; 66 pp.
$10.00 postpaid

from:
Stanley Garil
P.O. Box 50003
F Street Station N.W.
Washington, D.C. 20004


4,048,812
SOLAR-ENERGY CONSERVING
Harry E. Thomason, 689 Cedar Ave., Fort Washington, Md. 20022
Filed Feb. 17, 1976, Ser. No. 658,752
Int. Cl.² F25D 23/00
U.S. Cl. 62—264
7 Claims

1. Energy-conserving apparatus comprising first means for air-conditioning an area, second means for illuminating said area, and third means interconnecting said first means and said second means to conserve energy by automatically reducing the level of illumination and energy consumption of said second means when said first means is energized and to reduce the heat energy output of said second means to thereby reduce the heat load on said first means.

Solar Survival Frame Plans

This 40 sq. ft. solar-heated growing frame successfully raised veggies all through the worst winter in New England history. The secret of its good performance is a clever design utilising a hand powered version of the Zomeworks "Beadwall": at night styrofoam beads insulate the glass by filling up the cavity between the glass sheets. The plans are clear, big, and could obviously be easily adapted to a larger array of frames as you require. The Solar Survival people are also into a number of other projects including a very clever house and a solar hot water heater. —JB

Solar Survival Frame Plans
$6.00 postpaid

from:
Solar Survival
Box 119
Harrisville, NH 03450

Canadian Renewable Energy News

Canada has a newspaper covering the energy front. It seems to be getting better and better with each issue.

—JB [Suggested by John Meissner]

Canadian Renewable Energy News
$7.00/yr. (12 issues)

from:
C.R.E.N.
P.O. Box 4869 Station E
Ottawa, Ontario
Canada K1S 5B4

Boroughbridge, England — Europe's largest electricity-generating windmill, constructed in a remote field in north Yorkshire, quietly made history recently when it became the continent's first wind-powered energy source to feed into a national grid.

The new English mill is unique in many aspects, one being that, while it produces electricity, it does so by pump action and not direct generation.

According to a British government press release, the mill is a 30-kilowatt unit employing four hydraulic pumps to lift heavy concrete paving blocks, housed within its tower.

"The blocks are a 15-ton ballast weight, suspended from a piston in an upright cylinder," says Sir Henry Lawson-Tancred, the machine's designer and builder.

"The windwheel drives a bank of pumps feeding into the base of the cylinder, raising the piston and the weight," he explains, "Fluid (oil) is then pressurized at 2,500 psi, and that powers a pair of hydraulic motors driving electric generators."

Sir Henry chose the ballast approach "to smooth the wind's vagaries" as it gives a near-constant pressure and therefore a constant motor speed, regardless of fluid level. "Also, it's cheaper and the weight helps anchor the tower in high winds," he added.

The 15-metre structure is built with corrugated-iron paneling and holds aloft three fibreglass blades sweeping a diameter of 17 metres.

In a 32-km-h wind, they spin at 60 revolutions per minute.

The Organic Movement Meets the Real World

by Richard Nilsen

Consider this sequence of events. Rodale Publishing decides to separate the "Farming" from its **Organic Gardening and Farming** *magazine, and comes out with an additional publication,* **The New Farm**. *So what has changed? That hopelessly loaded word "organic," has disappeared from the cover. The inside-cover full page ad is for John Deere; and Wendell Berry writes an article describing his experimental use of an herbicide on some clumps of Johnson grass on his Kentucky farm.*

From the purist's perspective, shock will be a natural response. Wendell Berry using herbicide? Monsanto's Roundup, to be exact, which is currently being pitched in the slick ag-biz mags with one of those ominously aggressive slogans so much in favor with ad-men: "ROUNDUP – Deep Down, You Know It Works."

Or think about Integrated Pest Management the closest thing on anybody's horizon to a cure for the agricultural addiction to synthetic pesticides. IPM is a highly sophisticated management strategy – a systemic approach – to controlling pest damage. It includes biological control (e.g., introduction of natural enemies of a pest), crop rotation, cultural control, but also, and only when absolutely necessary, and on the basis of field monitoring and computer modelling, the use of synthetic pesticides.

IPM today is being advocated by a diverse spectrum of people, from Paul Ehrlich, the Rodale camp, and university entymologists, to USDA bureaucrats (lip service so far).

Again a shift is apparent: some who a few years ago were advocating only biological control are today in the IPM camp. Are these symptoms a sign of progress or of a sell-out? I think they are definitely a sign of the demise in influence of the self-sufficient, puritanical, rural utopian fantasy. What might be called the ostrich component of the back to the land movement has been tried and found wanting.

What have you really accomplished if your five organic acres get the downwind drifts whenever your neighbor sprays pesticides? Your neighbor's problem is your problem; especially if a hard-line ideology prevents you even from communicating with that neighbor. The world is connected both by ecological systems, and by the use and abuse of technology. And technological steps, once taken, are frequently irreversible.

A useful perspective on this situation comes near the end of the late Robert van den Bosch's book **The Pesticide Conspiracy** *(reviewed Page 36). It is important to realize that the late Professor van den Bosch fought constantly against the mindless over-use of pesticides; his courage against overwhelming odds, and his ability to channel a continuous anger and sense of outrage into workable alternatives, makes him one of the true heroes of this struggle.*

> . . . I wish to stress that under prevailing conditions we need pesticides. Pest control is one of the overwhelming realities of our time; pests gobble nearly half of what we grow, and they pose an immense threat to human health. In other words, pest management is one of the paramount concerns of humanity, and since we are currently locked into a chemical control strategy, we simply cannot drop this strategy overnight without suffering unimaginably. What's more, our crops and livestock are largely genetic artifacts that have to be coddled if they are to perform effectively or even survive. We aiso tend to grow our crops in monoculture, which sets things up for devastating pest outbreaks which, when they occur, can, under prevailing technology, be beaten back only by chemical sprays. Then too, our own finicky requirements for cosmetic, pest-free produce have led to the imposition of impossibly low pest-tolerance standards, which force the use of pesticides . . . The basic argument, then, is not against pesticides per se or chemical control as a tactic but, instead, against chemical control as our single-component pest-management strategy and the biocide as its operational tool. (pp. 203-4)

These shifts from ideology towards pragmatism are a good sign, I think; signifying that a part of the organic/environmental movement has matured, has evolved to a stronger and more influential position. Identifying the chemical companies as "the enemy" and then carrying on a holy war with multi-national corporations has sapped far too much effort away from a more fundamental problem: some of the people who didn't get the environmental message the first few times around are the same ones responsible for so much of the spraying – the farmers. The gulf between environmental professionals and that truly endangered species that actually makes its living off the land is by no means breached, but it looks as if, in small ways, the stage is now being set for communication instead of rhetoric and hopefully for an eventual collaboration.

The Least Is Best Pesticide Strategy

This book is not essential to any gardener who knows when to go out and pick the horn-worms off the tomatoes. But as the scale increases, so do the pest problems, especially with mono-cultures. Integrated pest management is the best available solution; and Goldstein's book is a useful layman's survey of the state of the art, and not a how-to manual. One great feature is 26 pages of access to 41 U.S. and Canadian institutions that offer college-level instruction in IPM and related fields. IPM means being able to think through a pest problem to a solution, instead of running for the spray gun. People with those skills are going to be in demand.

– Richard Nilsen

The Least Is Best Pesticide Strategy
(A Guide for Putting Integrated Pest Management Into Action)
Jerome Goldstein, Ed.
1978; 205 pp.
$6.95 postpaid
from:
The J.G. Press, Inc.
Box 351
Emmaus, PA 18049

In the 30 years following World War II, the number of pounds of pesticide used has increased by more than ten-fold. But in that same period, losses to pests remained about the same – about one-third of all crops in the field. Of the 25 most serious agricultural insect pests in California, nearly 75 percent are resistant to one or more insecticides – and 95 percent are either insecticide-aggravated or insecticide-induced pests.

•

For pesticide makers – though sales figures are ever-increasing, pressures from EPA regulations, the costs and red tape of obtaining official clearance for marketing new pesticides, the problems with pollution controls and worker safety at the manufacturing site all add up to major headaches for pesticide manufacturers. The costs of developing a new pesticide are in the range of $15 to $20 million.

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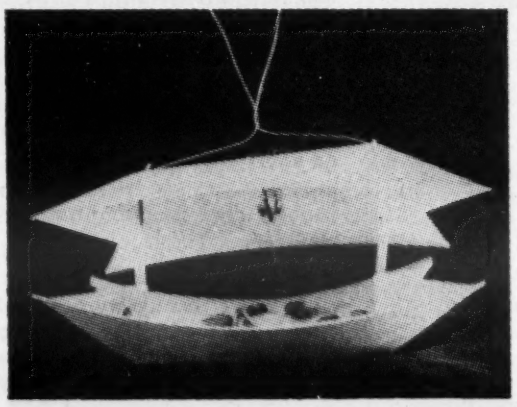


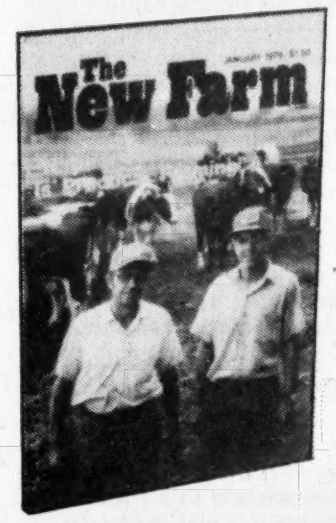
The small capillary tube hanging from the center of this insect trap releases a controlled amount of a sex attractant blend which permeates the orchard and confuses the males so they cannot find females for mating.

(Cornell University, Agricultural Experiment Station)

The New Farm

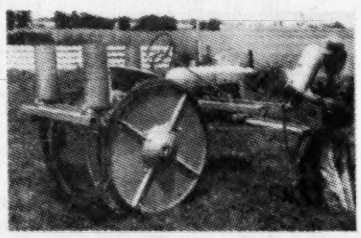
The first issue of this new Rodale off-shoot is impressive. It's much slimmer than the old Organic Gardening and Farming, *but the quality is high. And the focus finally is truly on farming, not some middle-ground backyard gardener. All of which should give contributing editors Wendell Berry and Gene Logsdon more room to move. There is a pleasantly surprising and good article on interplanting field crops — the surprise being that it is nine pages long. Taking the time and space to cover a subject well appears to have replaced the raving and hucksterism which are the inevitable traps of a short-length format. Let's hope this trend continues.*

—Richard Nilsen



The New Farm
Robert Rodale, Ed.
$10 /yr., 7 issues

from:
Rodale Press, Inc.
33 East Minor St.
Emmaus, PA 18049



The IPM Practitioner

This new newsletter looks like an excellent way to stay on top of a fast-moving and technical field. The masthead defines integrated pest management as "a technical decision-making process"; and if you find that fraught with ambiguity, you can probably nail down some clarity with a subscription. Contains news briefs, access to products and services, abstracts of current technical articles, book reviews, and a calendar of events.

—Richard Nilsen

The IPM Practitioner
(The Newsletter of Integrated Pest Management)
James R. Ziegler, Ed.

$10/yr., 12 issues
from:
Bio-Integral Resource Center
1805 2nd Street
Berkeley, CA 94706

In the typical chemical schedule, the farmer will harvest his wheat, then spray with paraquat to kill green growth and Lasso and Lorox to inhibit new growth before planting.

To meet the dual challenge of getting his beans in early enough *without herbicides*, Robert Mowen of Jerseyville, IL, rigged up some custom wheels for his IHC Cub that open the soil in his wheat fields and allow beans to be planted while the wheat is still maturing . . .

To open a shallow trench for the beans, Mowen fashioned extra-narrow steel wheels with special v-shaped wedges. Seed beans drop out of curved tubes behind the wheels. . . .

The key to making this system work, says Mowen, is to get the beans in by Memorial Day so that they're several inches high at combining time. Once the wheat is off, beans spread rapidly to cover the ground and inhibit weed growth, making chemical weed control unnecessary.

Propagate Your Own Plants

This is the perfect time of year to scrounge plant material, whether it be from cuttings, division, layering, or other propagation methods. It's the closest to cloning that gardeners can come, and all that is needed is the permission of the owner of a parent plant. This book describes the propagation of about 100 plants, most of which can be easily reproduced.

The plants the authors select are the cream of the crops. A few are herbs, such as caraway and jasmine, some are vegetables like jerusalem artichokes, asparagus and horseradish, and many fruits, nuts, and berries are included because of their wide range of adaptability and hardiness. Olives and hawthorne, figs, date palm and hazelnut. A few classic medicinal succulants, plus plantain and ginseng, and a selection of ornamental plants that would look beautiful together. A garden of all of these plants would be a Garden of Eden, and with the help of this book, you can get them all free.

—Rosemary Menninger

Propagate Your Own Plants
Wilma Roberts James and Arla Lippsmeyer
1978; 142 pp.

$4.50 postpaid
from:
Naturegraph Publishers, Inc.
Happy Camp, CA 96039

Aloes will grow in fairly frost-free areas in almost any kind of well-drained soil. Where winters are harsh, they must be potted and brought indoors for protection. They need shaded conditions in summer; maximum sun in winter. Keep them evenly moist during active growth and treat monthly with a complete fertilizer. Watch for mealy bugs. Over watering causes root rot, crown and stem rot. **Propagate** by severing offsets that develop around the parent plant, or by stem cuttings in those producing branching stems. Root cuttings in sand.

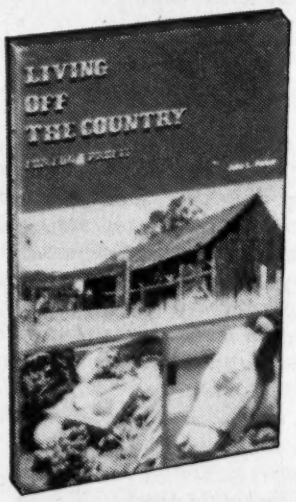
Living Off the Country for Fun and Profit

There have been so many books on this subject by now that it is a bit surprising when a good one comes along. Well-seasoned experience, and a perspective that considers rural livelihood in the context of an inflationary economy are what make this one worth reading. Anyone with sheep or cattle should take a look at the chapter on raising and training three breeds of European livestock guard dogs.

—Richard Nilsen

Living Off the Country for Fun and Profit
John L. Parker
1978; 193 pp.

$5.95 postpaid
from:
Bookworm Publishing Co.
Box 3037
Ontario, CA 91761



The natural instinct of any guard dog is to protect against wild predators, wild dogs and two-legged vandals. Predators are wary of the dogs and are often warned off by traces the dogs leave along the way. Stray or wild dogs are usually unwilling to cross the lines set up by the guards even when running in packs, and the guards will attack wild dogs as quickly as they go after any other predator. This is important because livestock raisers say that in many areas wild dog packs are becoming a greater menace than coyotes.

Guard dogs are extremely cautious about tackling humans, preferring to circle them at a distance. In Europe guard dogs are often taught to head for home at the sound of a shot. This can save the dog and alerts the owner to danger. In circling humans, the dogs crouch low and lie close to the ground at any sudden movement.

The Holistic Health Handbook
Wholistic Dimensions in Healing

It's getting so that every time a review copy with the words holistic health in the title comes across my desk I want to scream. Holistic health books seem to have nosed out diet books as the publishing industry's current craze (with jogging books now running a close third).

Robert Ornstein, writing in **Human Nature**, *recently suggested that the term holistic be retired for three years, since it*

> . . . has become the property of the flaky side of the human sciences and no longer belongs to those who are interested in completeness. In medicine the word has become the rallying cry for the wild, unsupported frings of healing. In education, it has become a byword for the simple refusal to teach reading and writing. In spirituality holistic religion has become the fountain of instant self-improvement courses and screaming therapy — tantrum yoga.

Well, yes and no. You cannot demand that the fringes of health practices be orderly and sclentific right away. As Richard Miles writes in my favorite piece from the **Holistic Health Handbook**,

> It is interesting to look at the root meaning of the word "confusion." It derives from the Latin *confundere*, meaning "to mingle or blend together." This is what appears to be happening in the health field. Many varied and confusing ideas abound in the scene and are in the slow, and sometimes frustrating, process of merging together into a new paradigm. . . .

Miles proceeds to describe four different current health/medical ballparks:

1. allopathic medicine (M.D. variety)
2. alternative medicine (healing approaches other than the M.D. variety)
3. humanistic medicine (efforts to train allopathic M.D.s to deal with the feelings and fears of patients)
4. bodywork therapies (yoga, Rolfing, Reichian therapies, acupuncture, etc.)

then goes on to quote Jefferson ("The only safe repository of power in a democracy is in the people themselves") by way of defining a fifth ballpark, in which the power of health and illness decision-making lies not with the practitioner, but with the individual. He chooses to call this fifth approach "holistic health." I would call it self-care.

With this minor change Miles' five health systems would provide us with five precise terms in place of one horribly imprecise one, and we could go along with Ornstein's proposal to send holistic out to pasture, not because it is unscientific, but because you have little idea of what someone means when they use it.

These two books provide introductions to a wide range of alternative and body therapies, which is what most people mean when they say holistic health. They both do a good job of it.

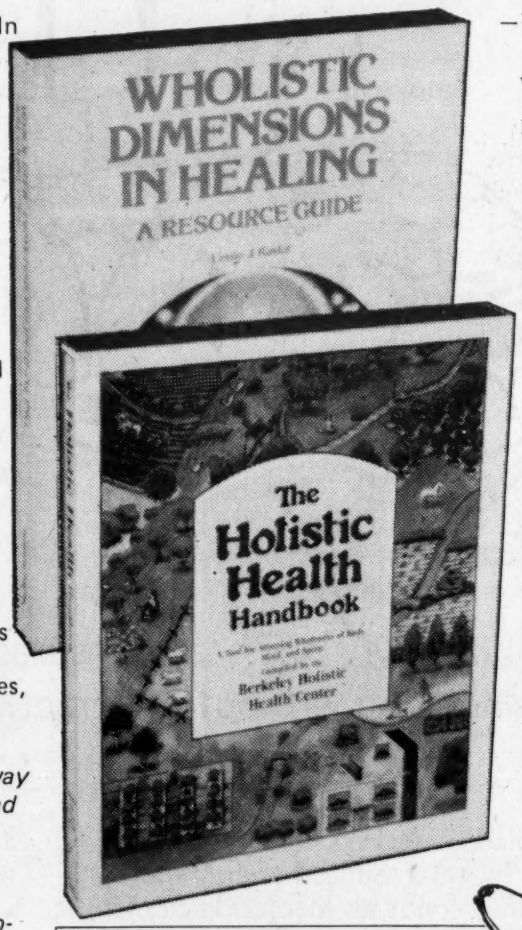
The Holistic Health Handbook *is a reader, containing nearly twelve dozen shortish chapters. There are introductions to such alternative approaches as acupuncture, yoga, eastern and western Indian healing traditions, naturopathy, polarity therapy, Rolfing, Bates eye exercises, iridology, chiropracty, reflexology, etc. Mixed in are a number of self-care chapters, including good ones on childbirth, natural birth control, home dental care, visualization, relaxation, family health, aging, and dealing with death. There are also several chapters on the legal problems faced by non-traditional healers.*

The authors are by and large enthusiastic practitioners of the approaches they describe, so don't expect objective evaluations. But if you'd enjoy a collection of short, well-written though not very well annotated bibliography, and — bless them — an adequate index.

Wholistic Dimensions in Healing *lacks both an index and a state-by-state cross-listing of resources, a serious drawback in a resource guide. It is, however, the best attempt to date at a national listing of alternative health care resources, listing 1,163 rather arbitrarily chosen groups, associations, schools, centers, clinics, journals, products, services, and researchers in alternative health practices. There are excellent, though very brief, introductions to sixty alternative therapies, with the balance of the book devoted to resource listings, organized by therapeutic approach. Interestingly enough, only about half of the therapies described in this book are also included in* **The Holistic Health Handbook**. *And when they both cover the same therapy they do it so differently that the two books make very complimentary reading.*

What neither of these books really provides is a well-evaluated annotated bibliography of books on alternative therapies. The best such bibliography, with the top books in each field plainly indicated, is to be found in Cris Popenoe, **Wellness**, *$5.25, postpaid from Yes Bookshop, 1035 31st Street, N.W., Washington, D.C. 20007.*

—Tom Ferguson, M.D.



Wholistic Dimensions in Healing
Leslie J. Kaslof
1978; 295 pp.
$7.95 postpaid
from:
Doubleday and Co.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

The Holistic Health Handbook
Berkeley Holistic
Health Center
1978; 480 pp.
$9.95 postpaid
from:
And/Or Press
909 Parker
Berkeley, CA 94710
or Whole Earth

A Trapper's Dog

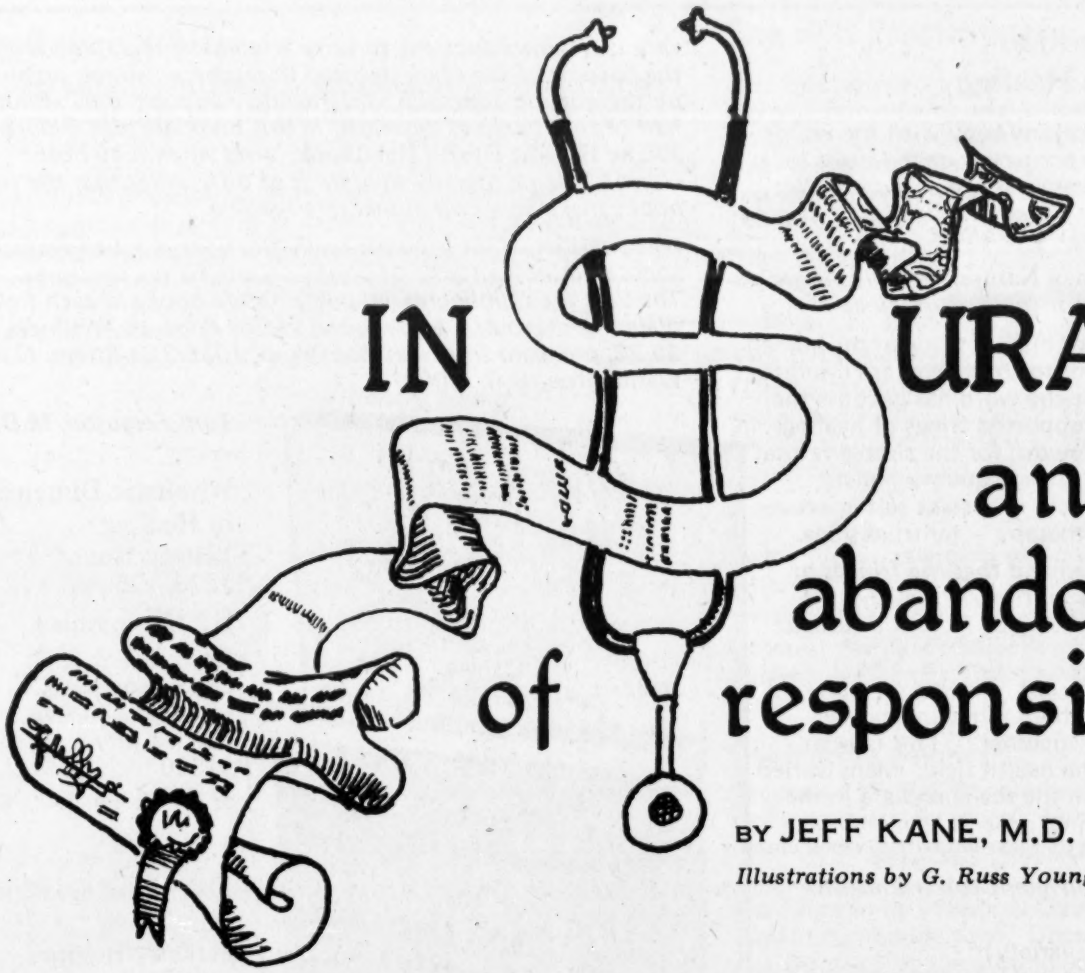
(From Leroy Rainey, Roseberry, Idaho, January 1979)

"We had a bad time when we first came to this country. We were living out where the roosters fuck the hoot owls and I was out of a job. So the Missus decides to take in ironing to get some money. You know, heating up the iron on the woodstove and sprinkling from a pork and beans can. And me, I decided to take up trapping.

"We had this old dog named Dave, looked like a coonhound with long hair that run into an airplane propeller. He was hungry as the rest of us and about half smart.

"I didn't have any traps, so being the optimist I was, I spent one night whittling a couple of stretcher boards to fit rabbit hides, starting small. When I got finished I set them outside the door and next morning when I got up, there was two dead rabbits laying there by my stretcher boards. I looked at old Dave and he kinda winked at me, so I went ahead that night and whittled up some bigger boards, and sure enough next morning there was a marten and a bobcat laying dead next to them, and Dave looking a little tired but happy.

"Well, things went on like that for quite a while. My fortunes was on the rise and me and Dave was eating good, until one night I came home half full of Jack Daniels and told my wife that we was getting too damn fancy to have her be taking in ironing anymore. Now I don't know what I was thinking about, and without the booze I probably wouldn't have done it, but I went and set that ironing board outside the door and never saw old Dave again." —J.D. Smith
McCall, Idaho



INSURANCE and the abandonment of responsibility

BY JEFF KANE, M.D.

Illustrations by G. Russ Youngreen

You'll stay healthier without health insurance.
Doctors give better care without malpractice insurance.

THIS ARTICLE BEGAN TO COOK when a friend told me he got a reduced premium on his auto insurance — not his medical insurance, his auto insurance — because he doesn't smoke. I had just paid an enormous medical insurance premium without even being asked whether I smoked. Nor had the company inquired as to exercise, diet, stress management, or, in sum, the ways I have found to be healthy. I subsequently found one company that offers a discount to non-smokers, but none that reward a customer for combined health practices.

Though neither I nor my wife have required medical care since adolescence we were billed strictly by age and sex. As my agent pointed out, older people and women make use of medical care disproportionately.

There is more than one way to slice a loaf. For instance, if people were categorized according to their individual usage of medical care there would be some reward for staying well. There seems to be, in the medical insurance system, a *de facto* penalty for actively maintaining one's health.

A major theoretical foundation of all insurance is that within a given actuarial class all people are at equal risk. This simply is not so. All snow, for instance, is cold and white; but try to find two identical snowflakes. In the same way, people are unique even though generalizations may be validly made of groups. The statistical description of a group may or may not pertain to individuals in that group. For example, we can determine through statistics that the average human being has one ovary and one testicle. From knowing characteristics of the group, "36-year-old men" we cannot conclude that Bill stands the same risks as Fred, and yet they pay similar premiums. Some members of any class, then, pay disproportionately.

In this article I will attempt to explain how we are not whipped around willy-nilly by a random universe. Further, though the cost of insurance is both unfairly distributed and uniformly excessive, my more heartfelt point is that its harshest price is the perpetuation of illusions that are inimical to health.

Dr. Kane, former Medical Director of the Berkeley Free Clinic, former chief of the Emergency Department at Fairmont Alameda County Hospital, at present is working on a book about health and quality of life — the larger context where some of the absurdities of modern medicine might resolve out.

For poignant illustration of "insurance mentality" I've included a selection of brief auto accident reports made on insurance forms, published by the Toronto Sun Paper *and sent to us by Suzanne Blessinger. The document is moving through the culture like nerve lightning.*

—SB

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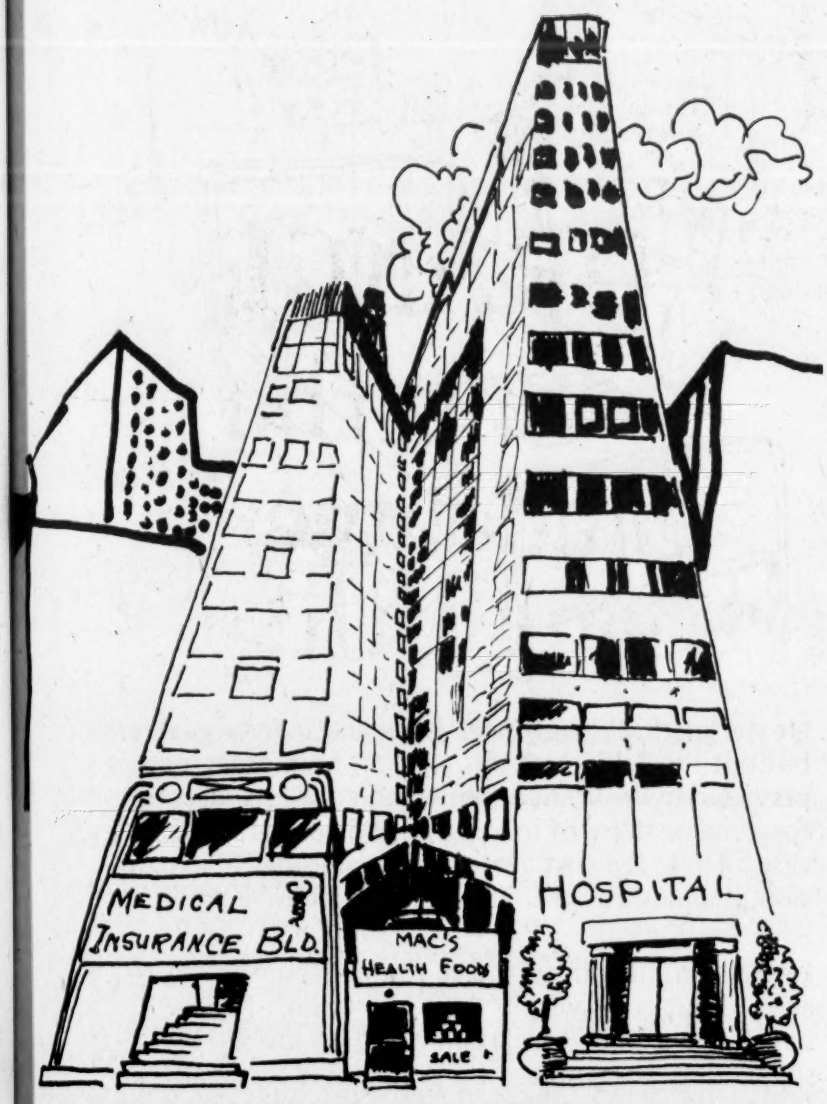


I am astonished, yet not dissuaded, by how many people feel that illness and injury are usually chance events. Starting with the obvious, we know of a number of "stress diseases," entities at least clearly exacerbated by stress, including duodenal ulcers, asthma, ulcerative colitis, and acne. This list could be lengthened indefinitely by people who have found a connection between stress in their own lives and their particular symptomatology. The point here is not so much that stress causes disease, but that some people have learned how to deal with stress better than others.

In addition, many unhealthy conditions are simply extensions of behavior. Leaving aside for this discussion whether chain smoking, heavy drinking, overeating, sociopathy, and other compulsions are chosen or inflicted, their association with emphysema, cirrhosis, obesity, injuries, and other scourges is too obvious to ascribe to the law of averages.

It is as if illness and injury are not so much nouns as they are verbs. Rather than tangible and discrete demons they are processes, stories, expressions of our being. When life goes well for Mildred she smiles; when it does not she "migraines." My own colds have consistently come on the heels of stressful situations. I have hammered my thumb only on days that were bummers in other ways as well.

We all know people who get sick as often as we get mail and, conversely, those who remain oblivious to every plague. I am surprised there have been no telethons for the "Accident-Prone," for this is a universally recognized style. Examination of our own experience is enough to convince most of us that illness and injury do not, as a rule, strike haphazardly.

"OK! OK!" replies the skeptic. "I can see how that is generally true, but how about the – God forbid– UNFORESEEN?" Suppose that even while I jog the sludge out of my coronary arteries I am hit by a truck? What if, heaven forfend, a meteorite pulverizes my medulla as I eat my breakfast? Or how about appendicitis? Sure, these things can happen. One of the most effective lessons I've learned, though, is that common events occur more frequently than uncommon ones. (The way it was originally put to me was

INSURANCE FORM AUTO ACCIDENT REPORTS

- As I approached the intersection, a stop sign suddenly appeared in a place where no stop sign had ever appeared before. I was unable to stop in time to avoid the accident.
- To avoid hitting the bumper of the car in front, I struck the pedestrian.
- My car was legally parked as it backed into the other vehicle.
- An invisible car came out of nowhere, struck my vehicle, and vanished.
- I told the police that I was not injured, but on removing my hat, I found that I had a skull fracture.
- I was sure the old fellow would never make it to the other side of the street when I struck him.
- The pedestrian had no idea which direction to go, so I ran over him.
- I saw the slow-moving, sad-faced gentleman as he bounced off the hood of my car.
- The indirect cause of this accident was a little guy in a small car with a big mouth.
- I was thrown from my car as if left the road. I was later found in a ditch by some cows.
- The telephone pole was approaching fast. I attempted to swerve out of its way, when it struck the front of my car.
- A pedestrian hit me and went under my car.

this: when you hear hoofbeats outside your window which do you think of first, a horse or a zebra?) Unexpected meteorite accidents *can* be expensive, but what already *is* expensive is the sum of my unused insurance premiums.

Recognizing both my employment of health-maximizing practices and the possibility of a zebra on my horizon, I dropped my medical insurance in favor of a very low-premium, high-deductible policy. I expect an eventual improvement in my understanding of fate and karma such that one day I will drop all insurance, but there seems to be no short-cut.

Insurance is a bet, a gamble on risks. We play better when we know the odds. If we consciously conduct our lives to favor health, medical insurance might generally seem a long shot. *Premiums of the health-conscious go, in large part, toward subsidizing the costly medical care of those whose behavior dictates physiological malfunction, or illness.*

There is an important objection that can be raised here, and for which I would like to digress. That objection relates to poverty. Below a certain economic level fewer choices are available. The malnourished, rat-bitten child and the adult striving for a job, basic dignity, or her next meal does not need to hear about maladaptive life styles. While I have second thoughts about paying for the chain smoker's emphysema, basic medical care is a right, the cost to be shared by us all. If I feel uneasy here it is about this: medical problems in poor people are often symptomatic of poverty itself. To simply pour money into medical treatment is like using dollar bills – no, ten-dollar bills – as band-aids. Divorced from a meaningful revolution in values, publicly-financed medical care for the poor perpetuates the illusion that the problem is only a rat bite and not a seething cultural abscess incurable by medicine alone.

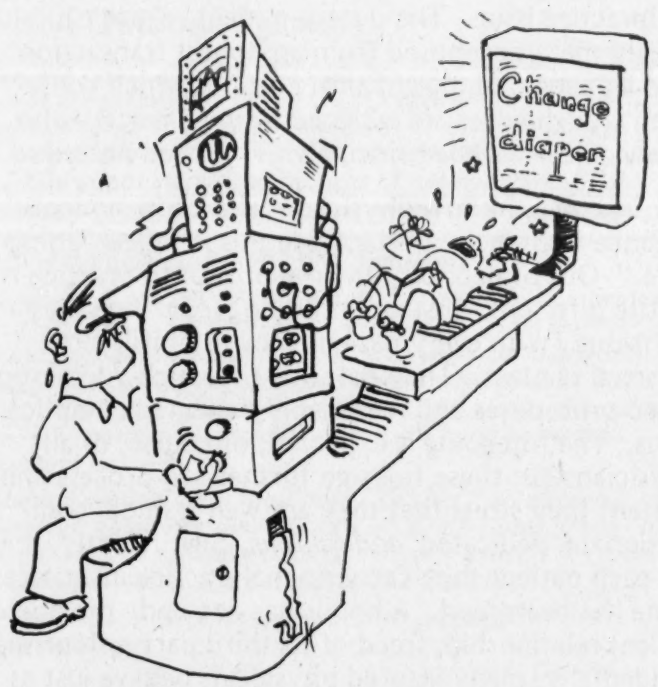
Healthy folk, as I said, pay *relatively* too much for medical insurance and we all pay *absolutely* too much. Whether we are really getting healthier in response to

greater medical investment is fascinatingly arguable, but not the subject of this article. Four areas, all pervaded by insurance-connected concepts, account for a major share of increase in the cost of medical care. These are cost averaging, technological expansion, malpractice insurance, and "defensive medicine."

Hospital administrators have found it convenient to average out costs within their operation. This is sensible in a way, for certain activities are self-supporting while others are predictable loss leaders. For example, many emergency departments generate a decent income while radiology departments, maintaining expensive and often underused – and locally duplicated – equipment, lose money. Thus a high-expense service can get billed down and vice-versa. As a non-insured patient I may scream bloody murder at hospital administrators about my $200 daily bed charge, but they will explain that this revenue benefits the institution homogeneously, covering the bed,

INSURANCE FORM AUTO ACCIDENT REPORTS

- Coming home, I drove into the wrong house and collided with a tree I don't have.
- The other car collided with mine without giving warning of it's intentions.
- I thought my window was down, but I found out it was up when I put my hand through it.
- I collided with a stationary truck coming the other way.
- A truck backed through my windshield into my wife's face.
- The guy was all over the road; I had to swerve a number of times before I hit him.



nursing care, food, utilities, the medical library, security, lab supplies, and the new cryosurgery unit. I can be billed, in effect, for items I am not even aware of, let alone have used.

But if the charges are "covered," then, well, what the hell: "they" pay it. Administrators, physicians, and other providers can equally rationalize stratospheric bills: "they" pay it. "They," the third party, be it a private company, Medicaid intermediary, or Social Security, examine their depleting resources and turn around and raise premiums or taxes: "Well, what the hell! Do they think it's free?"

"Technological expansion" is the process by which our family doctor of a generation ago has been replaced, cell by cell, with transistors. The small-town shaman who knew the family inside-out is an endangered species, having been nudged out of niche by modern medicine's Six Million Dollar Man and Bionic Woman. The personal care our parents can remember has been partly eclipsed by the incredibly intricate and accurate apparatus of today's technology. However undeniable the value of radioisotope scans and computerized tomography, undeniable also is their price.

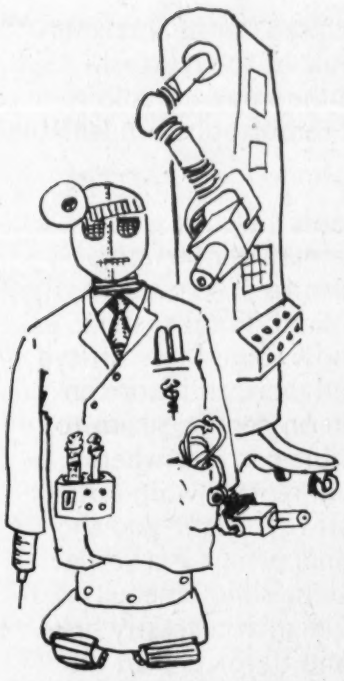
"Six Million Dollar" and "Bionic" are apt analogies. The first is obvious and, I'm afraid, conservative. "Bionic" describes the greater price, the psychic. That an android is widely admired, Frankenstein manifest, is an indication of how values have drifted. Our medical thinking, centered more and more on chemistry and machinery than on people, seems to be lurching toward an impossible paradise where death is obsolete, where we can replace worn-out organs, one after the other, with synthetic goo and computer chips until the original person is a vestige. We may realize in our lifetime the simultaneous capability and limitation of technomania: a greatly prolonged life of artificial color and flavor. "You hit only the target at which you aim," says the Zen archer. We have aimed at quantity and hit the bullseye. Our "health" insurance can hopefully buy us more quantity, but the quality of our lives is inescapably our own responsibility. To act as if things were otherwise is expensive indeed.

In the land of the litigious no one is blind. Once we submitted trustingly to our family doc, even if the prescriptions were invariably for colored aspirin or castor oil. Today, as often as not, we present ourselves to a physician we have never met, possibly in the hectic atmosphere of an emergency room, and are understandably likely to be less trusting. Moreover, we expect greater results from these moderns, backed as they are by such fabulous resources. Thus it is easier to be disappointed and to sue.

I said "disappointed," not "damaged" or "done in." A certain amount of true medical malpractice and even manslaughter has occurred since humans learned to be human. But I have seen flagrant maimers excused by their patients and, conversely, impeccable physicians harassed by malcontents. The rate of damage has not risen anything like the rate of disappointment, and this is where suits begin. Many a patient harbors a subliminal image of the physician as a physiologic magician, a miracle worker who can bring the set into the shop, hook it up to the oscilloscope, and repair every defect. That is, expectations are often surreal. Largely due to this phenomenon physicians often see patients as hypercritical and potential litigants. This is hardly a healing atmosphere, yet the business of medicine must go on.

The wheels are greased partly by malpractice insurance. Four years ago in the San Francisco Bay area the cheapest insurance obtainable by an emergency physician cost $10,000 annually. A group of three neurosurgeons got their best rate by signing a single contract for an aggregate annual premium of $140,000. Doctors are charged so much because more suits are filed and because courts are generally awarding more damages. Even those suits settled out of court or dropped necessitate huge legal fees. But we all pay for these massive hikes in insurance. Physicians simply lump premiums into the rest of their overhead

- **I pulled away from the side of the road, glanced at my mother-in-law and headed over the embankment.**
- **In my attempt to kill a fly, I drove into a telephone pole.**
- **I had been shopping for plants all day, and was on my way home. As I reached an intersection, a hedge sprang up, obscuring my vision. I did not see the other car.**
- **I had been driving my car for 40 years when I fell asleep at the wheel and had an accident.**
- **I was on my way to the doctors with rear end trouble when my universal joint gave way causing me to have an accident.**



and send larger bills to their patients, medical insurance intermediaries, and government agencies.

A significant theme in current medical practice is "defensive medicine." One way of avoiding malpractice claims is to overperform, to cover all the bases and then some. Though I visit the doctor with simple cold symptoms, I may find myself in line for chest x-rays, skin tests, bacteriological studies, and other procedures designed to rule out all but the common cold. In addition to the discomfort inherent in some tests, the cumulative jeopardy of radiological exposure, and the anguish endured while awaiting results, the decimal point in my bill moves steadily rightward.

Again, the bill has a psychic as well as economic aspect. Defensive medicine concretizes and perpetuates an adversary rather than a cooperative relationship between patient and physician.

The word "insurance," deriving from the Latin *securus*, is a bit deceptive. It conveys an aura of protection that does not pertain to real life. Insurance pays us after we have fallen ill, wrecked the car, or had our colon accidentally transected. It is compensation; it does not erase the catastrophe. To be sure, it is a close second, but wouldn't we prefer a whole body, a whole car, and an uncomplicated operation? In a way insurance is a self-fulfilling prophecy: the very possession of a policy increases the likelihood of a claim. See if these statements sound familiar:

"Well, if someone gets into the car and rips off the tape deck, at least it's insured."

"If a visitor slips on my walk and breaks a hip, at least I have liability insurance."

So we learn unconsciously to be a little less careful about locking the car or shovelling snow off the walk.

Medically oriented insurance is no different. The patient thinks, "Holy Cow! My doctor is ordering all these tests! Well, no matter – my insurance will pay. I hope she doesn't overlook something important, but if she does . . ." And the doctor thinks, "So what if I order $500 worth of tests? The insurance pays for it. And if, God forbid, I've overlooked something and it leads to a lawsuit, at least I've got my malpractice premiums paid up."

Insurance can be viewed in this way as a partial abandonment of responsibility. More precisely, we have hired a company to share our responsibility. If I take greater precautions for my own health and safety – that is, if I virtually enact my security – I will decrease my need to rely on third parties.

Medical practice has been affected centrally by the malpractice issue. The doctor-patient relationship has widely metamorphosed from an honest transaction into an alienated, mechanical event in which consequent rough edges are assigned to third parties who know neither of the principals. This need not be so.

For instance, I know physicians who carry no malpractice insurance. In the trade this is called "going bare." Out of necessity their approach to practice is a little different. Instead of buying insurance they act it out. With every patient they establish close personal contact. They describe thoroughly all anticipated procedures and reasonably expected complications. The foregoing is expected, of course, of all physicians but these folks go further. In process and content they stress that they are well-trained, compassionate, dedicated, *and fallible.* Significantly, they tell each patient they carry no malpractice insurance. None has been sued. A bonus has accrued: the doctor-patient relationship, freed of its third party, flourishes. Incidentally, many insured physicians behave just as carefully, and might do well to examine their "need" for insurance.

Physicians who carefully and caringly "go bare" are pioneers, as are lay people who assume greater responsibility for their own health, who consciously moderate the way they live. It is illusory to believe that insurance somehow produces better health, obviates malpractice, or protects hearth and home. Insurance is only a post-catastrophic aid. The principal work necessary to elevate the quality of each life can be done only by that individual. Personal power is not bought, sold, given, or taken: it is assumed.

Each of us is unique. Were we properly classified for actuarials, insurance companies would have to deal with 220 million categories. The risks with which we cope are as variegated as our personalities. More importantly, our capabilities flower only as we free ourselves from limitations, regardless whether those limitations are statistical, physical, or perceptual. This is where the path to health begins.

I will leave a summation to John Knowles, M.D., President of the Rockefeller Foundation and former medical director of Massachusetts General Hospital:

"The people have been led to believe that national health insurance, more doctors, and greater use of high-cost hospital-based technologies will improve their health. Unfortunately, none of them will. The next major advances in the health of the American people will come from the assumption of individual responsibility for one's own health and a necessary change in the life style of a majority of Americans." ■

Nomadics

Filson Outdoor Clothes

Cars are tinny, silverware is stainless steel, and fiber-board boxes are palmed off as houses. Contemporary economics seem designed to diminish standards of excellence. Even the durability and construction of clothing has deteriorated: Levi's will not stand four months of normal work; "Can't-bust-ems" have disappeared, and except for Ben Davis's polyester gorillas, there's hardly a tough, trim line of clothing available at all, especially in natural fibers.

Hardly, but the C.C. Filson Co. of Seattle is an exceptional line of clothing and outerwear for loggers, game wardens and other outdoor activities. Filson is to work clothes what White is to workboots. Their all-wool whipcords at $30 a pair will survive four or five Levi's at $16 a pair. Filson canvas or "tin" pants and coats are waterproof and extremely resistant to wear.

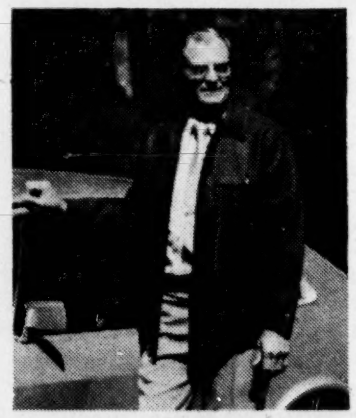
The top of the line is the Filson "Cruiser," an all-wool, water-repellant coat with nine pockets, in a rich forest green. It is tough enough for the woods but elegant enough for town — warm as a toaster and handsome as a Douglas Fir.

The company responds promptly to requests for their free catalogue.

—Peter Coyote

Catalog Free

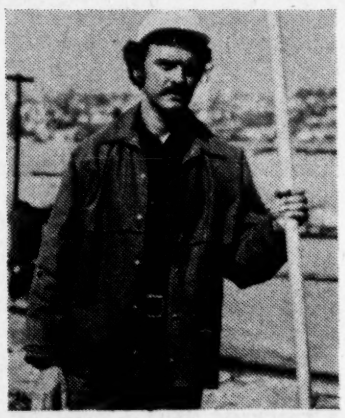
from:
C.C. Filson Co.
205 Maritime Bldg.
Seattle, WA 98104



Filson Olympic Cruiser

"Medium weight for Town & Country wear." Styling is smartly casual in a beautiful brown heather shade. An especially woven 21 oz. virgin wool gives this cruiser coat a classic beauty all its own. Features a cape front and a double back for extra protection. Special double lower pockets combine a utility pocket and concealed hand warmer pocket with side opening. Top front pockets and a full carrying pocket in the back provide exceptional utility. Added inside pocket. Button closures throughout. A rare combination of rugged good looks offers an excellent choice for all around use.

Color: Brown Heather; 100% Virgin Wool; 21 oz. Mackinaw Cloth; Lot 140; $72.50.



Filson Double Logger Coat

"First Cousin to the Hard Hat." A basic design concept for the logging and construction fields. An additional layer of all cotton duck forms a deep front cape, back cape and outer raglan sleeves. No outside shoulder seam. Large utility pocket on the right front with combination pocket on left front. Reinforced snap fasteners on front closure and pockets. This is a "no nonsense" garment in our famous oil finish duck and provides exceptional water repellency and utility.

10 oz. water repellent duck; Lot 63; oil finish duck; $35.

The Mariner's Catalog Vol. 6

We've enthusiastically reviewed the previous five volumes. It's becoming clear that The Mariner's Catalog *is at heart a magazine, not a book, and I'm damned if we're going to review every issue. Besides, editors George Putz and Peter Spectre are coming this summer to help with the Fall CQ. They can do their own principled not-mentioning of next-year's Vol. 7, now in progress and doubtless equally excellent.*

—SB

The Mariner's Catalog, Vol. 6

George Putz and
Peter Spectre, Eds.
1978; 192 pp.

$7.95 postpaid

from:
International Marine
Publishing Co.
21 Elm Street
Camden, ME 04843
or Whole Earth

You've dreamed of a one-man submarine? Someone the military trusts will make one for you. The K-250 sub is 11' 8" overall, $12,000. Optional are trailer, u/w telephone, bottom floodlight, and mechanical claw. From:

Kittredge Industries, Inc.
Warren, ME 04864

•

The International Boat Plan & Kit Directory
North Island Publishing Co.
Box 399
Eastsound, Washington 98245
$3, plus $1 postage and handling, paperbound, 1978

The printing of this Directory gives the amateur and professional boatbuilder, for the first time, a single publication to look to for boat plans and kits plus the hundreds of other items needed to build and use a boat with a high degree of proficiency. There is absolutely no other publication printed that caters to the do-it-yourself boat builders' needs in the comprehensive manner that this Directory does.

—IBP & KD

•

We had been using regular kerosene in our stoves because I object to paying $5.00 a gallon for stove fuel. For the stoves it was fine, for the bulkhead lamp it stinks. It would drive us out of the tiny cabin. This summer we were anchored at Round Island in company with Gordon and Doris Swift aboard their lovely *Madrigal of Exeter*. From Gordon I learned that Thinex, the paint thinner, is a highly refined petroleum product which burns clean and odor-free in kerosene stoves and lamps. Maybe some chemist will tell me some day that the stuff's explosive in a lamp, but Gordon had been using it for a long time and we used it too with great success for the few weekends that were left of the summer. Thinex doesn't have a picture of a boat on the can, but maybe that's why it doesn't cost $5.00 a gallon.

—Jay Hanna
Rockport, Maine

Sail Your Bike

What bike rider among us hasn't spread their coat-wings and sailed before a tailwind? It's a nice feeling. You can have it crosswind and even upwind too with one of these kits. It takes skill, a bit of daring, and I expect a bit of luck as well, but the kit is well worked out and appears to solve most problems inherent in such rigs, except trauma-free stopping on short notice. The instructions are a bit vague, but I doubt that is a serious matter since experience is obviously what counts the most. Looks like fun.

—J. Baldwin

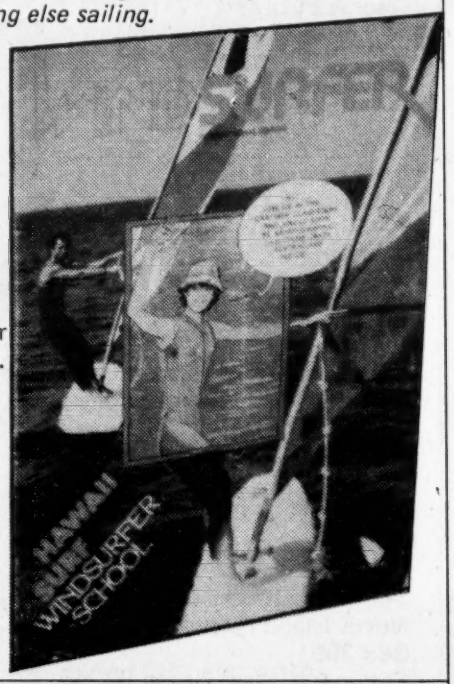
Sail Your Bike
Instruction manual
$1
Complete rig
$144 postpaid
from:
Danner-Bike Co.
P.O. Box 1682
Hawaiian Gardens, CA
90716

Windsurfer

Sailboarding, as it's now called, has come a long way since we reported the invention of the craft in an early Whole Earth Catalog *and the commercial availability of Windsurfers in the* Epilog *(p. 645). The sport took off everywhere there was water, but especially in Europe, so naturally the leading international magazine on the subject is published in Holland. Racing gossip, new tricks on the board, equipment wrinkles, basic how-to, new board manufacturers (66 different boards available now), spectacular photos – all the fine details an obsession feeds on are in the mag.*

I don't know any way you can have more fun on the water than standing up on a vessel that's lighter than you are and faster than almost anything else sailing.

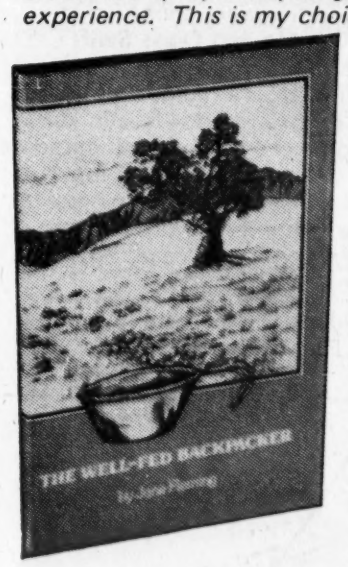
–SB



Windsurfer
Brendan Boyle, Ed.
$25/yr., 6 issues
from:
The Subscription Manager
Windsurfer Magazine B.V.
Herengracht 566
10 17 CH Amsterdam
Holland

The Well-fed Backpacker

You can hike a weekend using only Twinkies for fuel and still get home ok. But if you're going out longer or in harsh weather and high altitudes, you're going to have to do better than junkfood. Turns out that most folks take one of the two obvious choices: they go heavy duty with store-bought food that weighs too much and has heavy packaging, or they go freeze-dried and put up with extreme expense and the, uh, esthetic deficiencies. Most folks also don't know how to properly balance their meals either. Most books intended to help, don't. This one does, at least it helps me. Clever, well-balanced recipes from lightweight inexpensive ingredients are dished up by a lady of goode minde with lots of trail experience. This is my choice of all the books on the subject.



–J. Baldwin

The Well-fed Backpacker
June Fleming
1976; 96 pp.
$4.50 postpaid
from:
Far West Book Service
E. Bristol and K. McCanna
3253 N.E. Hoyt St.
Portland, OR 97232

Blizzard Breakfast No. 1

Smoked salmon
Mixed dried fruits
Goodie bars

Blizzard Breakfast No. 2

Jerky
Fruit leather
Granola (without milk)

•

Don't scorch melting snow when you're making the water supply; the water will taste burned. Make sure there is always a half-inch or so of water in the bottom of the pan.

The Travel Catalog

Would you like to spend your vacation at Bluegrass festivals? or perhaps visiting the greatest roller coasters? or at a ranch run by bird watchers? How about a nude beach, film festivals, whitewater running or the finest in scenic drives? You name it, you'll probably find it in this fascinating collection of things to do and see. In fact, you'll likely find things here you've never even heard of let alone wished for. Addresses are given as well as pertinent travel information. This book is now standard equipment in my car's map department. Now if you'll excuse me, I have a few things to pack.

–J. Baldwin

The Travel Catalog
Karen Cure
1978; 191 pp.
$6.95 postpaid
from:
Holt, Rinehart, Winston
383 Madison Ave.
New York, NY 10017
or Whole Earth

The Magic Table

There exists, in New York City, a sort of Round Table at the Algonquin for magicians. Lovers of magic, whether prestidigitators in their own right or merely fans, are welcome. But if you go, be prepared to get a live dove when you ask for salt to put on the melon (inside which you just found a playing card). Magicians back from Europe are often on hand to relate their experiences with ghosts. You may play magician's assistant to some of the world's greatest – it depends on who's around when you go. The Magic Table is at the Scandia Restaurant in the Piccadilly Hotel at 227 West 45th Street in New York – from about noon until two.

•

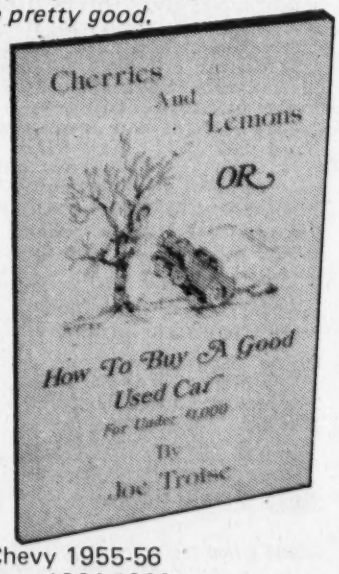
Toys

They're there in numbing profusion – at the Museum of Yesterday's Toys, 52 George Street in St. Augustine 32084; at the Museum of the City of New York in New York City; at the Shelburne Museum in Shelburne, VT 05482; at the Perelman Antique Toy Museum, 270 South Second Street, in Philadelphia. It's a subject that holds such fascination for so many people that you'll find some sort of display in almost every area that gets any visitors.

Cherries and Lemons or How to Buy A Good Used Car For Less Than $1000

This highly opinionated, occasionally very funny little book could prove very useful to you if you gotta find a car and don't know anything about it. My experience shows that most of his recommendations are pretty good.

–J. Baldwin



Cherries and Lemons
(or, How to Buy a Good Used Car For Under $1000)
Joe Troise
1977; 52 pp.
$2.75 postpaid
from:
Barkfeather Publishing
519 Concord St.
Boulder, CO 80302

The Author's Automotive Hall of Fame

Dodge Dart: 1963-1969
Plymouth Valiant: 1963-1969
Chevrolet: Chevy II, 1964-67; Chevy 1955-56
Ford: Falcon, 1964-1967; Mustang 1964-1966; Fairlane, 1965-1967.
Checker: 1959-1964

•

English cars can be beautiful. English cars can be fun. English cars can also be an incredible nuisance. Regrettably, I can't recommend any English automobile for you. This includes the Plymouth Cricket and Arrow.

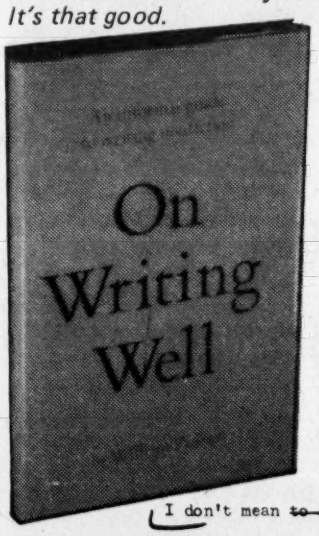
Communications

On Writing Well

Just reading William Zinsser's **On Writing Well** *is bound to improve your prose. Zinsser, having written editorials for the New York Herald Tribune and essays for Life and numerous other magazines, is now teaching writing at Yale. He knows his game thoroughly, has a sense of the good in his work and that of others, and he is a master of the difficult art of transparency. Furthermore, he is capable of telling you how to get the hell out from between the reader and what you are trying to say. And no, Virginia, such writing is not devoid of style.*

Hugh Nash, one of my personal sources of writing wisdom, offered this apropos of Zinsser and the craft we strive to master all our lives: "Good writers, I suspect, spend a whole lot more time wondering what they want to say than wondering how to say it. If you get the first problem worked out, the second one often seems to solve itself."

*If you are serious about communicating with your readers, this book belongs on your shelf right alongside Strunk and White (***Elements of Style***) and your dictionary of choice. It's that good.*



—Stephanie Mills

On Writing Well
William Zinnser
1976; 151 pp.
$5.95 postpaid
from:
Harper & Row
General Books
Keystone Industrial
Park
Scranton, PA 18512
or Whole Earth

I don't mean ~~to suggest~~ that some people are born clear-headed and are therefore natural writers, whereas ~~other people~~ others are naturally fuzzy and will ~~therefore~~ never write well. Thinking clearly is ~~an entirely~~ a conscious act that the writer must ~~keep forcing~~ force upon himself, just as if he were ~~starting out~~ embarking on any other ~~kind of~~ project that ~~calls for~~ required logic: adding up a laundry list or doing an algebra problem ~~or playing~~

Help

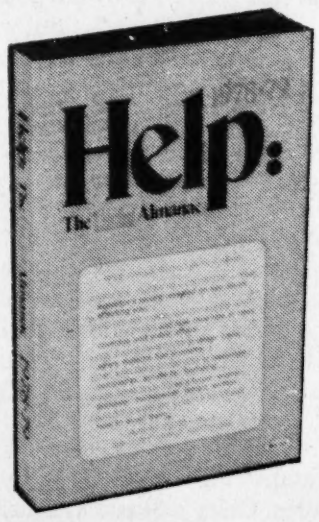
This is a new breed of almanac, to be distinguished from the general-reference, astrological, planting, or fun-to-read types. **Help** *is a consumer almanac, and it's well named indeed. Every bit of information in it will help you deal with big government or big business — abuses to be wary of, how to report them, how to get more help, how to find and choose lesser evils, or how to opt out altogether.*

If the sections on spending wisely don't help, there's info on better jobs, better banking, lower taxes, and government financial assistance. And if the data on the hazards of food, clothing, cosmetics, wiring, travel, etc., don't keep you alive, **Help** *will at least steer your survivors clear of funeral frauds.*

Taken as a whole, this is a necessarily depressing catalog of all the ways we're all being ripped off, but the details and advice in each individual section will save you from the worst.

—Randy Alfred

Help
(The Useful
Almanac
1978-79)
Arthur E. Rowse, Ed
1978; 524 pp.
$4.95 postpaid
from:
Whirlwind Book Co.
80 Fifth Avenue
New York, NY 10011



RATING THE STATES ON TAXES
Where the Bite's the Biggest

State	Income Tax as Pct. of Personal Income	Sales Tax (cents)	Beer Tax (dollars)[1]	Cigarette Tax (cents)[2]	Gasoline Tax (cents)[3]	Motor Vehicle Registration Fee[4]	Real Estate Deed Tax[5]	Per-Capita Tax Burden	Overall Grade[6]
Alabama	1.20%	4¢	$16.53	12¢	7¢	$13.75	.50	$ 455	B+
Alaska	3.68	none	7.75	8	8	30.00	none	1,896	C–
Arizona	1.24	4	2.48	13	8	8.00	2.00	731	B
Arkansas	1.42	3	7.51	17.8	8.5	26.00	.55	454	D+
California	1.92	4.75	1.24	10	7	11.00	none	964	B+
Colorado	1.93	3	2.48	15	7	15.20	.05	728	B–
Connecticut	.22	7	2.50	21	11	21.00	.55	778	D–
Delaware	3.46	none	2.00	14	10	20.00	10.00	768	D–
Dist. of Colum.	3.25	5	2.25	13	11	79.00	5.00	924	F
Florida	0	4	12.40	21	8	36.50	2.05	566	D

Information Please Almanac
The World Almanac

Every home or office needs an up-to-date, general-reference almanac. Despite a few recent entries in this field, these two still lead the pack in accuracy, completeness, and ease of locating information. Each contains some information that the other doesn't, and annual revisions are usually slight. So, over the last 20 years, I've found that buying one almanac every other year and switching back and forth between the two yields the best data-to-dollar ratio.

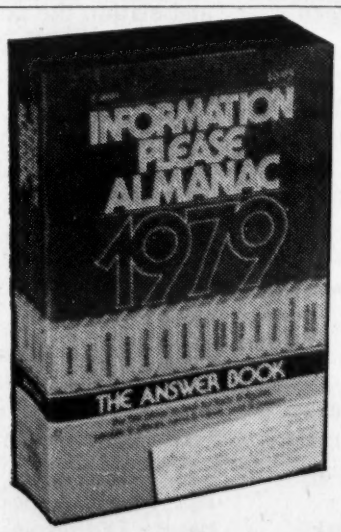
From space to sports, politics to postage, discoveries to disasters (you get the idea), either book will answer thousands of questions, settle hundreds of arguments, give you background details on scores of newspaper articles, and provide dozens of hours of browsing pleasure. Keep it next to the john for entertainment.

—Randy Alfred

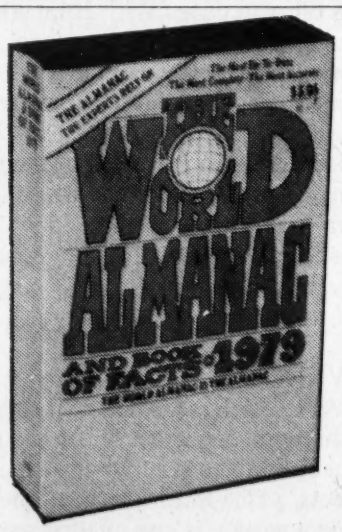
1977 First successful man-powered aircraft. Paul MacCready, an aeronautical engineer from Pasadena, CA was awarded the Kremer Prize for creating the world's first successful man-powered aircraft. The *Gossamer Condor* was flown by Bryan Allen over the required 3-mile course on Aug. 23.

1978 First successful transatlantic balloon flight. Three Albuquerque, NM men, Ben Abruzzo, Larry Newman, and Maxie Anderson, completed the crossing (Aug. 16. Landed Aug 17) in their hot air balloon, *Double Eagle II.*

—Information Please



Information Please Almanac, 1979
Theodore B. Dolmatch, Ed.
1978; 1007 pp.
$3.95 postpaid
from:
Information Please
Publishing, Inc.
57 West 57th St.
New York, NY 10019
or Whole Earth



The World Almanac and Book of Facts, 1979
George E. Delury, Ed.
1978; 976 pp.
$3.95 postpaid
from:
Newspaper Enterprise
Association, Inc.
200 Park Ave.
New York, NY 10017
or Whole Earth

GOOD MOVIES

BY
SHEILA BENSON

Norma Rae (Sally Field) is a goddamn jewel – if she only knew it. But when we meet the remarkable central character of **NORMA RAE**, a sketchily educated, widowed young millworker/mother, she's drifting dangerously into a pattern. "A steak dinner, a box of pralines, 'n coming three times in a row" at the local motel with a growing collection of men. She deserves better and she gets it: the friendship of a wry, eloquent, tough-minded young labor organizer (Ron Liebman) down from the Bronx to organize her Southern textile mill.

Director Martin Ritt's films are marked by humanism (**Sounder, The Molly McGuires, Casey's Shadow**), but he may never have had as pungent and finely textured a script to work from as this one by Harriet Frank, Jr. and Irving Ravetch. **Norma Rae** is two love stories, a drama, and a fascinating labor union struggle, but its center is the growing admiration between these two exotics, one of the deepest considerations of the real possibilities between a man and a woman in American films to date. With John Alonzo's accurate, evocative camerawork, **Norma Rae** makes its points about life in a roaring fabric mill effortlessly. There are fine performances by Beau Bridges as Norma Rae's husband, Pat Hingle as her lovin' daddy, and Barbara Baxley and Gail Strickland. But it is Sally Field and Ron Liebman's stirring portraits which may last with you for weeks.

☆

INVASION OF THE BODY SNATCHERS is not as terrifying as it is chillingly engaging, but in among its expected virtues (miraculous special effects, a fine musical score, fine camera work), is one quality remarkable in any recent film: it contains real people who care for/love each other for a variety of very real reasons. Nice to find anywhere, it's particularly surprising in a science-fiction framework where depth of character is not a hallmark. Phil Kaufman directed this fine remake of Don Siegel's 1956 low-budget classic, and among its bigger stars – Donald Sultherland, Brooke Adams, Leonard Nimoy, Jeff Goldblum and Veronica Cartwright – you can find Siegel himself, and Kevin McCarthy, the first version's star.

☆

ICE CASTLES is an interesting example of a (successful) ad campaign geared to bring in one audience (the kids) while perverting utterly the intent of the film. **Ice Castles** is not **The Other Side of the Ice Rink.** It's a close-up look at the pressure cooker of championship ice skating competition, a comment on suffocating (if well-meant) family ties, and only last, a struggle against trauma. Director Donald Wrye is the film's co-author; his dialogue is funny, abrasive and real. He distinguishes carefully between sentiment and sentimentality (as he did in John Gunther's **Death Be Not Proud** for television.) And he has a cast particularly suited to a quiet, truthful approach to character: Tom Skerritt (last in **Turning Point**), Jennifer Warren, Colleen Dewhurst, and Robbie Benson. Wrye has also made the first film to give the *feel* of championship skating, the passion and elation the skaters must feel covering an Olympic-size rink in five scraping glides.

☆

Why would anyone be urged to see a two-hour and 45-minute film about Dutch colonialism in Java in the 1850s? Because **MAX HAVELAAR** is as chewy and rewarding, in its way, as **War and Peace** and doesn't require the better part of a summer. Director Fons Rademakers, Holland's preeminent film maker, is not well known here, but he is an impassioned, authoritative director. In this adaptation of a 19th-Century Dutch novel Rademakers has two strong points in his favor: the beauty and fascination of the country in which most of the film is set, and the great central performance of his star, Peter Faber as Havelaar, a heroic, admirable character. Some of the film's symbolism is a little easy, and the characters do not deepen greatly from our first glimpse of them, but these are slight cavils in the face of **Havelaar**'s remarkable combination of large-scale action and intimate detail. A memorable work.

NORMA RAE

INVASION OF THE BODY SNATCHERS

MAX HAVELAAR

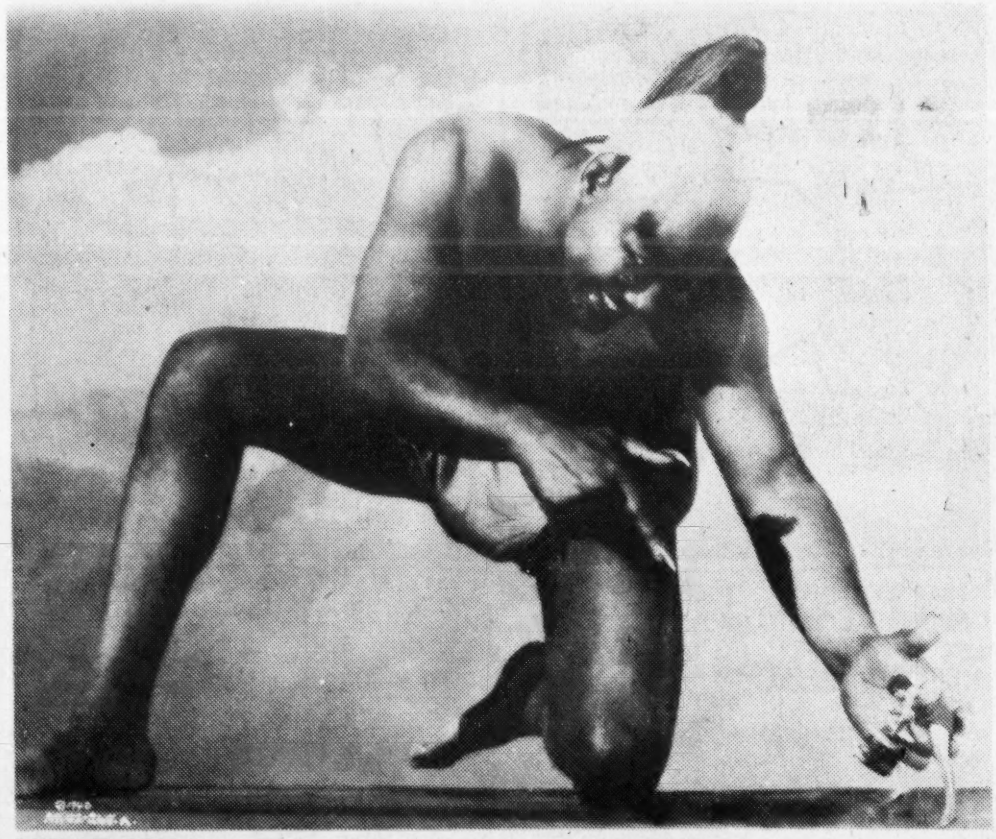
HAROLD AND MAUDE

☆

Walter Hill, a director with enormous style (**The Driver**) has done a film with minimal substance but visual fireworks in **THE WARRIORS**. Its premise is a crock (if those eight beleagured gang members *had* to get from the Bronx to Coney Island they could have hailed a cab, you know), yet what Hill has achieved is a pure American martial arts movie. No blood, sensational stylized action, and platoons of outrageous villains – the roller skating gang, the baseball team gang (with greasepaint faces like Kiss), the Harry Truman-shirt gang, and so on. Two beers go well with this one.

☆

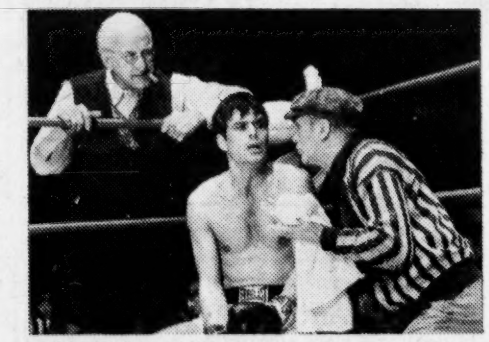
A great treat showed up in San Francisco at Christmastime and it may be working its way across the country. The 1940 version of **THE THIEF OF BAGDAD**, with its mechanical flying



THE THIEF OF BAGDAD

ICE CASTLES

GET OUT YOUR HANDKERCHIEFS



MOVIE MOVIE

THE WARRIORS

horse, its Genii in the bottle, the duel with the monster spider, and more, is one of the most beautiful Technicolor fantasies ever made. Its impeccable cast included Sabu, Conrad Veidt, Miles Malleson (the rotund British character actor who also wrote this script), John Justin, June Duprez, the most beautiful Arabian Nights princess, and of course, Rex Ingram as the Genii. An enduring treasure, it should be a required part of every child's fantasy life.

☆

Anyone around who hasn't seen **HAROLD AND MAUDE**? Surely, among the ten- and fifteen-time repeaters there must be someone who missed this most special film. The good news is that Paramount has at last struck new prints of its 1971 black comedy, and high time – the old ones were perforated like postage stamps. If you hear that it's a love story between Harold, almost 20, and Maude, almost 80, don't run away fearing whimsey. By some magic of Hal Ashby's direction of Colin Higgins' script and the performances of Bud Cort and Ruth Gordon it's not. (How the man who later wrote **Silver Streak** and **Foul Play** could have done this remains a mystery, but savor this one in any case.) A sometimes overlooked facet is Vivian Picles' brilliant account of Harold's Hillsborough mamá.

☆

How does a saucer-eyed, knobby-kneed 13-year-old boy (named only Riton) walk off with a gem (endearing Canadian actress Carole Laure) under the noses of two grown men, one her adoring husband? (Gerard Depardieu). As writer-director Bertrand Blier sees it in **GET OUT YOUR HANDKERCHIEFS** this prodigy man/child doesn't view her as a species apart, for starters. (Why it should take a prodigy to come up with this tack is interesting in itself.) **Handkerchiefs** is in some ways the French sex-film noir and after a witty opening it sags slightly until the charming Riton takes over, but it is blithe, warm and thought-provoking. (After you've left the theatre, a little reflection shows that our romantic couple is hatching not an egg but a ticking bomb, but that's another movie.)

☆

MOVIE MOVIE is a delight. Director Stanley Donen is a meticulous stylist and writers Larry Gelbart and Sheldon Keller have carefully honed their parodies of two Thirties movie staples, the boxing melodrama **Dynamite Hands** and the backstage Broadway musical **Baxter's Beauties of 1933.** George C. Scott is the name at the top but as befits the period, the most engaging performances are by the movie's kids, relative newcomers: Barry Bostwick (best known from **The Rocky Horror Picture Show**), Harry Hamlin, and the sensational Ann Reinking as a furry-voiced nightclub dancer up to no good whatsoever. It's too bad they couldn't have held to gorgeous black and white for both films (or even achieved the rich old b & w quality), but one can't have everything in this world.

☆

And if you were to choose films to savor a single performance, you might pick your way carefully through **Agatha** for Vanessa Redgrave's glowing portrayal of Agatha Christie; or around the murky and confused **Murder by Decree** for James Mason's splendid Dr. Watson, cornerstone of the Empire; or over to **Superman** for Christopher Reeves' tongue-in-cheek, dead pan, dead-on 70s Prince Charming. ■

AND, HEY, HOW ABOUT
THESE KIDS TODAY
by R. CRUMB
HEY, D'I TELL YA 'BOUT TH' NEW SPEAKERS I PUT IN MY SPIFSTER?
OH YEAH? HOW MANY C-RS Y' GETTIN'?
I GOT A 695 IN THERE MAN! NO PROBLEM.... QUADRIPHONIC WALL O' SOUND!!
YOU GOT A DECK IN FRONT?
FUGGIN' AY!
I'M TAKIN' MY MA-CHINE OUT THIS WEEK-END!
YEAH? WHERE YOU GONNA RUN IT?
UP AT McKINNEY'S.., BEST TRAILS UP THERE...NOT TOO MANY BLINDS, AN' NO HAUL-OUTS!
REXALL
HOT SHIT, MAN... HEY LET'S CRUISE HERFY'S...I COULD USE A COUPLA BIG BOFFERS!!
I NEED BREAD... SPENT MY LAST BUCKS ON A SET O' DUAL PEDDERS FOR MY ROAD GLIDER...
I'LL TREAT THIS TIME... REMEMBER, YOU STILL OWE ME FOR THAT HIT O' COKE LAST WEEK...
MAN THAT WAS GOOD COKE...WHEN YOU'RE DOIN' 85 ON A 240 CM HIGH-WINDER AN' YA CAN'T FEEL ANY-THING, YOU KNOW IT'S GOOD COKE!
VAVOOM
R. CRUMB'S
Patricia Pig
SEARCHING FOR THE ULTIMATE SHOPPING MALL
SO, PATRICIA, HOW'S YOUR RELATIONSHIP WITH DENNY COMING ALONG?
WE'RE ONLY EATING HEALTH FOODS NOW...
PARKING
I READ AN ARTICLE THAT SAID THAT ALOTTA TIMES FOOD HAS ALOT TA DO WITH WHETHER YER RELATIONSHIP WORKS OUT OR NOT...
RILLY? THAT'S INTRISTING
I HAVE A HARD TIME GETTIN' DENNY TO GO ALONG ON SOME THINGS... HE'S SUCH A MEAT 'N' POTATOES MAN!
OH SO IS WAYNE! HE'D NEVER STAND FOR BROWN RICE AN' VEGE-TABLES! HERE'S A PARKING SPOT!
IT HELPS ME KEEP MY WEIGHT DOWN...I USETA EAT DIET FOODS BUT Y'KNOW THEY PUT SO MANY BAD CHEMICALS IN THOSE DIET FOODS!
WAYNE HATES TH' TASTE OF DIET FOODS TOO... HE'S GOTTA HAVE HIS STEAK 'N' MASH P'TATOES...
Radio Shack
DOO-DAD SHOPPE
MMMM! THAT'S WHAT I WANT RIGHT NOW! A BIG THICK JUICY STEAK... BLOOD RED RARE...
SLURP DROOL
I WISH I COULD STICK TO A DIET LIKE YOU, PA-TRICIA! YOU LOOK SO THIN THESE DAYS! LET'S LOOK IN "MODE O' DAY" JUST FOR FUN! C'MON!

Learning

Inside Mom

My sister says whenever she wants to learn about anything new and incomprehensible, like the stock market or relativity or aerodynamics, she goes to the children's section of the library and comes away feeling more enlightened than the average reader of Scientific American. *This is ostensibly a book for children, but anyone from an obstetrician to a three-year-old will find in it something he didn't know before, and be delighted with the experience. The text is thorough without being condescending or over-burdened with detail; heredity, conception, embryology, pregnancy and birth are explained and illustrated simply and clearly. Necessary anatomical and medical terms are defined with memorable precision and subsequently employed throughout the book. Technical description is embellished with numerous historical and cultural anecdotes, such as the nineteenth century child, one of the first delivered with the use of anaesthetics, whose mother in a burst of gratitude named her Anaesthesia. Precise, accurate drawings and diagrams are accompanied by whacky sketches illustrating the kinds of trivial but relevant information that make learning anything fun. The five brief pages on heredity and genetics in particular provide one of the most concise and understandable explanations I've seen of that complex subject.*

—Carol Van Strum

Inside Mom
(An illustrated account of conception, pregnancy and childbirth)
Sylvia Caveney
1977; 93 pp.
$5.95 postpaid
from:
St. Martin's Press
175 Fifth Avenue
New York, NY 10010

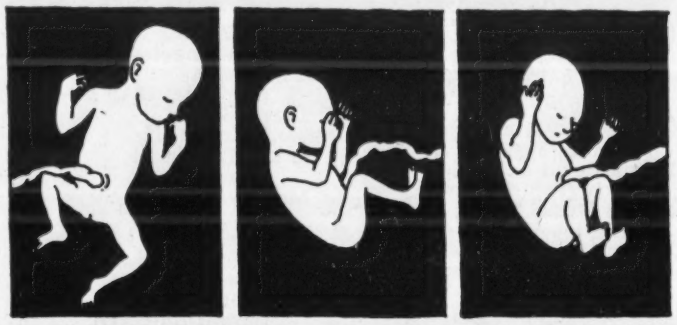
The Family Bed

Tine Thevenin has written a delightful and convincing rebuttal to the experts who warn us to keep our children out of the parental bed. Drawing on history, practices in less civilized countries, current psychological research, and a disarming series of anecdotal accounts from parents, **The Family Bed** *makes a strong case for itself, putting to rest residual fears of smothered babies, unnatural attachments and psychological scars. (After a childhood spent in several extended family beds, I search my consciousness in vain for traumatic memories of the primal scene or for complexes Oedipal or Electric. I do remember quiet talks, long back rubs and the warmth of my parents or grandmother against the dark.) Since most children love to sleep with their parents and some bitterly resist sleeping alone, perhaps, as Tine suggests, we should take this behavior at face value and follow their natural inclinations as well as our own.*

—Anne Cummings

The Family Bed
(An age old concept in child rearing.)
Tine Thevenin
1976; 189 pp.
$4.45 postpaid
from:
Tine Thevenin
P.O. Box 16004
Minneapolis, MN 55416

Several parents expressed the opinion that since their family began to sleep together, its members were more relaxed, touched one another more, and felt closer to each other. One mother, realizing the importance of touch, wrote, "Our family does not 'touch' physically as much as I would like. Night contact is one way of making up for this."



Between bouts of movement the baby sleeps. All babies have their favourite "lies," and your way of sleeping may be the one you started in the womb.

•

At 28 weeks, when his head hair starts growing fast, he sheds the lanugo. At this stage he may enjoy sucking his thumb or finger, and may even cry when he can't. Some babies arrive with thumbs marked by long sucking. His fingernails are growing so fast that by the time he is born they will probably need trimming.

•

A birth stool, very common in Europe.

From Two to Five

This is one of my favorite books about children. Chukovsky, a Russian poet, combines a discerning ear for language with exuberant appreciation for the small child's remarkable perception, logic and language. His great charm lies in his eagerness to listen to children, to delight in what they have to say about the often bewildering world they experience and in the ingenious ways they choose to say it. Chukovsky's defense of fantasy and fairy tale is classic, as are his insights into the structure and function of poetry by and for the child.

—Carol Van Strum

From Two to Five
Kornei Chukovsky
(Translated and edited by Miriam Morton)
1963, 1968; 170 pp.
$2.95 postpaid
from:
University of California Press
2223 Fulton Street
Berkeley, CA 94720
or Whole Earth

Enchanting children's speech! It will never cease to give me joy. I once overheard the following delightful dialogue:

"My daddy himself told me this. . . ."

"My mommie herself told me that. . . ."

"But my daddy is himselfer than your mommie — my daddy is much more himselfer. . . ."

And it cheered me up to hear a three-year-old little girl mutter in her sleep:

"Mom, cover my hind leg!"

Another one, when speaking to her father over the telephone, asked:

"Daddy, why do you have such a dusky-dusky voice today?" This was the first time she had heard her father's telephone voice.

•

To become a poet the youngster must be full of animal spirits. In the early spring, on the fresh green grass, when children become pixilated from the wind and the sun, they could go on and on pouring forth verse to express their exhilaration. Often these rhymes grow out of ecstatic, rhythmic movement, are meaningless, and fulfill mainly the function of accompanying music. This inclination of small children to get "drunk" on melodic rhymes accounts for the nature of many nursery songs in Russian, Serbian, Czech, Swedish, Finnish, and English folklores.

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Frank Olinsky

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Martin Takigawa (technical photography)

CoEvolution Quarterly — Spring '79 Financial Report

EXPENSES	Nov.,Dec.,Jan. (Predicted)	Nov.,Dec.,Jan. (Actual)	Feb.,Mar.,Apr. (Predicted)
Salaries and fees			
Office	$ 24,000	$ 21,327.26	$ 14,500
Production	8,000	5,913.38	6,000
Editors	9,000	8,156.09	7,500
Contributors	5,600	5,525.00	3,300
Office rental, materials, etc.	10,000	14,161.91	12,000
Phone	1,200	884.65	900
Promotion	11,000	9,059.73	2,000
Printing	21,000 (50,000 copies)	23,861.21 (50,000 copies)	21,600 (50,000 copies)
Subscription process and mail	17,500	16,221.05	16,500
Shipping	1,600	1,084.95	1,200
Business reply	1,300	2,005.00	1,500
Refunds	200	461.79	400
Total	$110,400	$108,662.02	$ 87,400
INCOME			
Subscriptions, gifts and renewals	$ 76,000	$ 98,670.37	$ 60,000
Retaining and Sustaining	4,000	4,084.00	4,000
Back Issues	5,000	4,028.55	4,000
Distribution	20,000	20,991.86	20,000
Total	$105,000	$127,774.78	$ 88,000
NET PROFIT OR (LOSS)	($ 5,400)	$ 19,112.76	$ 600

POINT Financial Report

CQ (detail above)	PAST QUARTER Nov.,Dec.,Jan. '78-'79
INCOME	$127,774.78
EXPENSE	108,662.02
CQ Books	
INCOME	
Penguin-Viking	—
Direct mail-order	5,874.25
EXPENSE	
Production & Mail-Order Supplies	4,437.97
Catalog & Epilog	
INCOME	
Penguin-Viking	—
Direct Mail-Order	2,226.00
EXPENSE	
Production & Mail-Order Supplies	—
Maps, Posters, II Cybernetic Frontiers	
INCOME	12,168.42
EXPENSE	985.75
T-Shirts	
INCOME	7,582.44
EXPENSE	2,201.90
Miscellaneous	
INCOME	
Point, Miscellaneous	297.77
Jamboree	—
EXPENSE	
Point, Miscellaneous	1,157.90
Jamboree	833.00
TOTALS	
INCOME	$155,923.65
EXPENSE	$118,278.54

POINT Balance Statement 31 January 1979

ASSETS	
Cash in bank	$103,582.46
Investments	29,654.42
Accounts receivable Distributors	38,907.19
INVENTORY	
Back issues, CQ	120,909.98
Maps, poster, II Cybernetic Frontiers	282.25
Mail-order LWEC & WEE	1,386.00
Mail-order CQ Books	2,018.75
Penguin inventory	
CATALOG ($1.73)	18,727.25
EPILOG ($1.01)	51,627.16
Pomegranate inventory	
Maps	300.00
Galaxy Posters	500.00
T-Shirts	500.20
LIABILITIES	
Accounts payable	—
Deferred SB salary	28,435.55
Subscription liability	271,236.00

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That phrase under the access of an item in the CQ *means that you can mail order it from:*

Whole Earth Truck Store
c/o Zen Center
300 Page Street
San Francisco, CA 94102

Note: Please add $ .75 to any order to cover shipping and handling. Add 10% to foreign orders. Inquire for UPS or Air Mail postage charges.
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The CoEvolution Quarterly
Box 428
Sausalito, CA 94965

Gossip

Patty Phelan deepened her research on hospitals. She has been moonlighting helping a local lady figure out how to start a better hospital. Suddenly, during the last week of **CQ** *production, Patty was doubled over and immobilized with pain in her abdomen. At Marin General Hospital the most kind and competent Emergency Room staff diagnosed for hours and couldn't figure her ailment. "Maybe," said Patty at one point, "I should just go home and stay in bed." The nurse looked up from installing an I.V. in Patty's arm — "It's called denial," she smiled.*

Later that night they decided they had enough indications of appendicitis to justify surgery. Once inside it turned out the problem was an ovarian cyst clear over on the other side from the incision. Much gut-tugging ensued. The rest of the week a wiped-out but game Patty was visited by compassionate **CQ** *staffers — who were nice despite having their own complaints of an unusually arduous production so dramatically upstaged. Patty knows a lot more about hospitals.*

All of us have had our problems with the birth defect babies in this issue — nightmares and such. One night when I made the mistake of working late with the photographs, I found I was afraid to go to sleep. I knew they were in there waiting for me. They were. Evelyn typesetter was the only one sanguine about the pictures. She had a defective baby herself a few years ago which died before its first birthday.

In lighter news the **CQ** *staff welcomed back to its bosoms Don Ryan — the doer of paste-up, camera, maps, and diagrams — who has been off on assignment for nearly a year making plates for the soon-famous* **California Water Atlas**.

Meanwhile I joined Magic Theater in San Francisco for three months for their production of Michael McClure's new play **The Red Snake** *— a Jacobean revenge drama. I played what some papers tactfully called a cameo role. A guard, actually, with three entrances and eleven words to perform. About 350 hours went into doing that — fascinating, all of it. An admirable company. Anne Herbert's favorite line was one the king delivered to a lady of the court who wouldn't stop crying: "Cheer up or I'll have you executed."*

I owe fellow member of the Metric Conversion Council Richard Porter a correction. In "America Is Not Switching to Metric" last issue I reported that his scheme to have some school kids learning just metric was met by other Council members saying it was already happening, making Dick look like a fool. Well, they were wrong, Dick wasn't. While we're at it, we failed to credit Samuel Chart as the translator of "The Song of Alhaji Fabala Kanuteh" in issue 19.

Shortly after my birthday this winter someone asked how it felt to be 40. Thinking I was going to say relief I said, "It's a release." It was. For the first time in decades I cleaned out my desk, my home, my car, and my calendar. A rite of passage that works.

—SB

Helping CQ distribution

It's nice to see some black ink on the financial page — but that was our biggest (Xmas) quarter. We need to keep things going all year long to secure our future — you know, astro-turf for the volleyball court, leather-bound first editions, esoteric electronics for the computer. In the past you have all come through with gift subscriptions, expanded our circulation, and made the crucial difference. But we need another avenue. We get a lot of calls from people offering to volunteer their time, we get lots of complaints about our direct mail efforts, so now we are wondering whether we can get some direct reader participation that, if it works, would help to end direct mail — increase our distribution.

Right now we only ship out about 16,000 copies of each issue for resale in bookstores and newsstands (and sell about 80% of that). We think that there is a larger readership out there and we hope that you can help us find it. All of you must have a favorite bookstore or newsstand that might not know about the **CQ** and might want to start selling it. We'd like you to take an issue or two down to show at these places and try to interest them — specifically make an effort to talk to the actual person who orders magazines. If they have never heard of the **CQ** mention our **Whole Earth Catalog** origins and that we are the ongoing **Catalog**. Virtually everyone remembers that. It's a good way to start out trying to explain what we are. You might mention that the **CQ** sells in the stores it is currently in. One small, local Mill Valley bookstore, The Book Depot, sells about 75 copies per quarter and Cody's, a large, well-known bookstore in Berkeley, sells 200.

If the place you go to already carries us, check to make sure that we are displayed in a good place. A bad place is to be stuck in with books on soft technology or ecology. A good place is with the other magazines or in some kind of featured spot on a counter.

Check your local public library and your school or college libraries to see if they are subscribers. You might try convincing your dentist or doctor to do a bit of "magazine redecoration" for the waiting room — exchanging **CQ** for **Reader's Digest**.

If you spark some distributor interest give the people the tear-off coupon at the top of the return envelope (inside back cover), or give them my name and address or send me their name and address. (Pick one or some of the above.)

Let us know what kind of responses you get. And please let us know your ideas and fantasies on other ways we can (inoffensively and inexpensively) grow. In order to keep all of us volleyball addicts on the court — and keep all of you in magazines — we need your assistance. Non-profit magazine publishing is a participation sport.

Andrea Sharp
Office Manager and
Fair-to-middling Volleyball Player

Order Form

We've enclosed an envelope, overleaf

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- [11] TWO CYBERNETIC FRONTIERS Book — $2
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All subscriptions start with current issue unless you indicate otherwise, and are sent via surface mail. For special service (mailed in envelope, first class or airmail) check box below:

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Partial Contents of Past Issues *(Issues 2, 10 & 11 also available, others not listed are Out of Print.)*

14 Summer 1977

Voluntary Simplicity (3) *Duane Elgin and Arnold Mitchell*
Voluntary Simplicity (1) *Richard Gregg*
The Poverty of Power Reviewed *Kenneth Boulding*
Remarks on Recombinant DNA *James Watson*
There Ain't No Graceful Way *Astronaut Russell Schweickart talking to Peter Warshall*
Mushroom Hunting in Oregon *Andrew Weil*
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The Transformation of the Tract Home *Richard Nilsen*
Burning Wood *J. Baldwin*
Handspinning *Diana Sloat*
The Price of Marijuana Misinformation *Russell Falck*
Death Does Not Exist *Dr. Elisabeth Kubler-Ross*
The Death of Ivan Ilych *Leo Tolstoy*
Hospice in America *Lynette Jordan*
Goethe in the Pea Patch *J.D. Smith*
Turkey Drop *Terrence Williams*
Dan O'Neill's Comics and Stories
Left Over in Your Heart *Will Baker*
Computer Hobbyist Publications *Marc LeBrun*
The Poem Is That Voice In Between *Acoma Poet Sim Ortiz talking with Lewis MacAdams*

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Solar Water Heaters in California, 1891-1930 *Ken Butti and John Perlin*
The Wandervogel *John de Graaf*
The Ideas of Greenwich Village *Malcolm Cowley*
Sanctuary in Cuba *Huey P. Newton*
Havana Province, 1977 *Conn Nugent*
Neighborhood Preservation is an Ecology Issue *Stewart Brand*
Living Lease *Michael Phillips*
Space Day Symposium *R. Crumb*
Voluntary Simplicity Followup and Comments: Response to the Voluntary Simplicity Questionnaire
Who Cut Down the Sacred Tree? *Michael W. Foley*
The Hawksbill Turtle *Kevin Stevenson*
Odd Bodkins *Dan O'Neill*
New Crops *Rosemary Menninger talking with Richard Felger*
Insulation Heresy *Richard Nilsen*
Wilderness Plots *Scott Sanders*
Two Dangling Animal Stories and a Heavy Bear Story *J.D. Smith*
The Custer Wolf *Patrick Holland*
Broken Circuits, Smoke and Fire *Judy Melvoin*
If the Spirits of the Dead Do Walk Among Us, Where They Spend Their Summer Vacations? *Robert Goldman*

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But First, A Word from Our Guest Editors *Larry Lee and Scoop Nisker*
The Mass Media and the Future of Desire *Gene Youngblood*
The Earth Gods vs. the Sky Gods: Publisats against the Oligoposat *Sol Yurick and Wes Thomas*
Getting into THE ACT *interview with Harry M. Shoosan III and Andrew J. Margeson by Robert Horvitz*
Four Arguments for the Elimination of Television *Jerry Mander*
Hypnotic Age Regression of a Television Addict *Paul Krassner*
Deprogramming the Media Mind or Turn Off, Tune Out and Drop On Over Some Time *Scoop Nisker*
Three Forefathers *Larry Lee and Jay Kinney*
Tesla *Bud Spurgeon*
Flip Points *Jerry Brown meets Marshall McLuhan*
The Greens (Les Verts) *Sylvie Crossman*
The Goose and the Gander Were Talking One Night *R. Crumb*
Ethical Technology *Michael J. Goc*
Buildings as Organisms *Day Chahroudi*
Mr. Boney Parts *Dan O'Neill*
A New Wolf *Rodney Sirois talking to Lynn Franklin and Ron Poitras*
Celebrations *photos selected by Minor White and Jonathan Green*
Yellow Diamonds *Malcolm Wells*
Ah, Firefighting *Randy Black*

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17 Spring 1978

A Defence of Sacred Measures *John Michell*
Governor Brown at the Mental Hospitals *Orville Schell*
Cops Without Guns *Ken Kesey*
More Yellow Diamonds *Malcolm Wells*
Environmental Mutagens/Carcinogens *Bruce N. Ames*
Language, Thought, & Disease *W.D. Ellerbroek, M.D.*
The Nerds *R. Crumb*
Number is Different from Quantity *Gregory Bateson*
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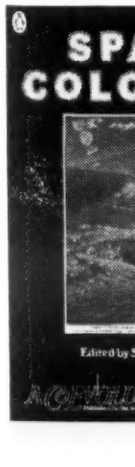

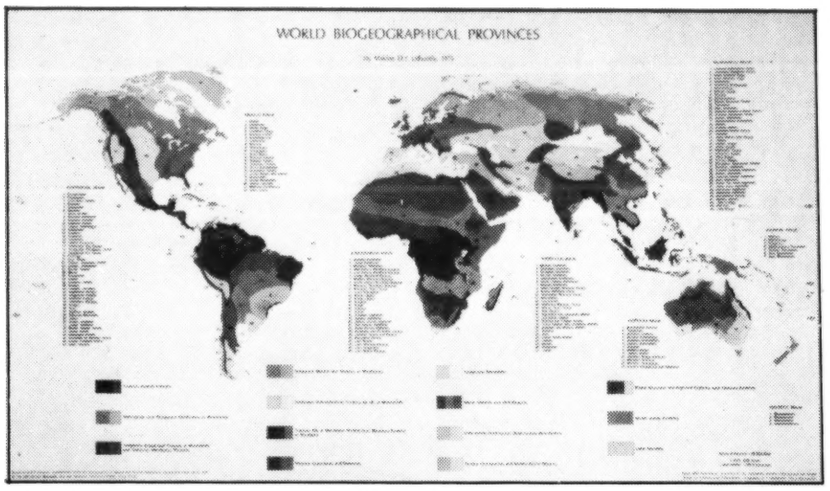

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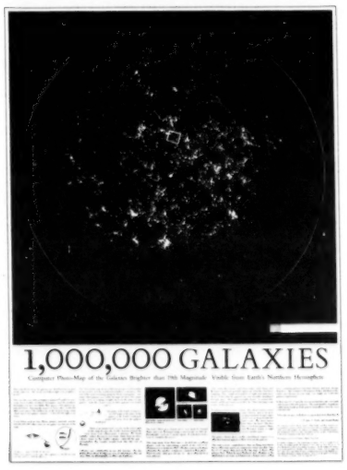

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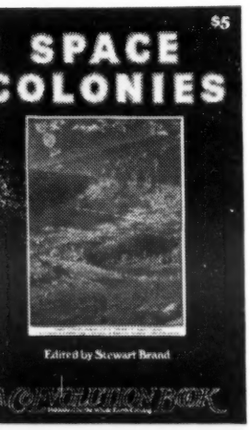

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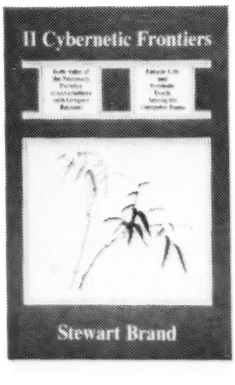

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